

1978

Tasks and duties of professional Extension 4-H and Youth Leaders employed by the Iowa Cooperative Extension Service

Donald Henry Goering
Iowa State University

Follow this and additional works at: <https://lib.dr.iastate.edu/rtd>



Part of the [Educational Administration and Supervision Commons](#)

Recommended Citation

Goering, Donald Henry, "Tasks and duties of professional Extension 4-H and Youth Leaders employed by the Iowa Cooperative Extension Service " (1978). *Retrospective Theses and Dissertations*. 6454.
<https://lib.dr.iastate.edu/rtd/6454>

This Dissertation is brought to you for free and open access by the Iowa State University Capstones, Theses and Dissertations at Iowa State University Digital Repository. It has been accepted for inclusion in Retrospective Theses and Dissertations by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.

INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.
2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.
3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.
4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.
5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

University Microfilms International

300 North Zeeb Road
Ann Arbor, Michigan 48106 USA
St. John's Road, Tyler's Green
High Wycombe, Bucks, England HP10 8HR

7813227

GOERING, DONALD HENRY
TASKS AND DUTIES OF PROFESSIONAL EXTENSION
4-H AND YOUTH LEADERS EMPLOYED BY THE IOWA
COOPERATIVE EXTENSION SERVICE.

IOWA STATE UNIVERSITY, PH.D., 1978

University
Microfilms
International

300 N. ZEEB ROAD, ANN ARBOR, MI 48106

Tasks and duties of professional
Extension 4-H and Youth Leaders employed by the
Iowa Cooperative Extension Service

Donald Henry Goering

A Dissertation Submitted to the
Graduate Faculty in Partial Fulfillment of
The Requirements for the Degree of
DOCTOR OF PHILOSOPHY

Department: Professional Studies
Major: Education (Adult and Extension Education)

Approved:

Signature was redacted for privacy.

In Charge of Major Work

Signature was redacted for privacy.

For the Department

Signature was redacted for privacy.

For the Graduate College

Iowa State University
Ames, Iowa
1978

TABLE OF CONTENTS

	Page
INTRODUCTION	1
The 4-H and Youth Program	2
Need for Study	7
Purpose of Study	9
Hypotheses to be Tested	11
Definitions	13
Delimitations	14
Organization of the Study	15
REVIEW OF LITERATURE	16
Introduction	16
The Role of the Extension 4-H and Youth Leader	16
Related Role Studies	22
Summary of Role Studies	24
Job Analysis	25
Summary of Job Analysis	30
Validity of Selection Procedures	32
Summary of Validity of Selection Procedures	37
Chapter Summary	39
METHODS OF PROCEDURE	41
Introduction	41
Instruments Used in the Study	42
Population and Sample Determination	43
Population of the study	43
Selection of sample	45
Collection of Data	49
Treatment of Data	52
FINDINGS	54
Description of Respondents	55
Number of years in present position	55
Sex classification	57
Educational level completed by respondents	59
Type of geographical assignment of the professional	
Extension 4-H and Youth Leaders	61
Prior experience as a 4-H member	61
Section One Summary	64

	Page
Tests of Hypotheses - Task Analysis	67
Hypothesis one - Is task performed?	68
Hypothesis two - Relative time spent on task if performed	77
Hypothesis three - Relative criticality of task if performed	99
Tests of Hypotheses - Duty Area Analysis	113
Hypothesis four - Is duty performed?	114
Hypothesis five - Relative time spent on duty area if performed	125
Hypothesis six - Relative criticality of duty area if performed	137
Hypothesis seven - Difficulty of performing duty area	148
CONCLUSIONS AND RECOMMENDATIONS	150
Section One - Conclusions	150
Section Two - Recommendations for Consideration	164
Section Three - Recommendations for Additional Research	172
SUMMARY	175
BIBLIOGRAPHY	186
ACKNOWLEDGEMENTS	191
APPENDIX A. AIR JOB ANALYSIS QUESTIONNAIRE SENT TO TWO PROFESSIONAL GROUPS	193
APPENDIX B. JOB ANALYSIS QUESTIONNAIRE USED WITH VOLUNTEER RESPONDENT GROUPS	210
APPENDIX C. TWO EXPLANATORY LETTERS FROM: (a) THIS INVESTIGATOR, CO-SIGNED BY DIRECTOR OF THE IOWA CES, AND (b) AIR	221
APPENDIX D. EXPLANATORY LETTER TO AREA AND STATE ADMINISTRATORS	224
APPENDIX E. EXPLANATORY LETTER TO THREE VOLUNTEER LAY GROUPS	226

	Page
APPENDIX F. INTRODUCTORY POST CARD SENT TO ALERT SELECTED VOLUNTEER LAY GROUPS	228
APPENDIX G. REMINDER CARD SENT TO RESPONDENTS WHO HAD NOT RETURNED QUESTIONNAIRES	229
APPENDIX H. LETTER TO COUNTY EXTENSION STAFF ASKING FOR ASSISTANCE IN HELPING TO CONTACT RESPONDENTS WHO WERE LATE IN RETURNING QUESTIONNAIRES	230
APPENDIX I. TASK ANALYSIS RESULTS	232
APPENDIX J. NUMBERS, PERCENTAGES AND MEANS OF RESPONDENTS FOR THE 14 DUTY AREAS	241
APPENDIX K. CRITERIA UTILIZED TO IDENTIFY IMPORTANT TASKS AND DUTY AREAS FOR USE IN RECOMMENDATIONS	266

LIST OF TABLES

	Page
Table 1. Questionnaire return analysis	51
Table 2. Number of years in present position	56
Table 3. Sex classification	58
Table 4. Educational level completed by respondents	60
Table 5. Type of geographical assignment of the professional Extension 4-H and Youth Leaders	62
Table 6. Prior experience as a 4-H member	63
Table 7. Tasks performed by 51 percent or more of Extension 4-H and Youth Leaders where statistically significant differences between professional staff groups were noted	70
Table 8. Tasks performed by fewer than 51 percent of Extension 4-H and Youth Leaders where statistically significant differences between professional staff groups were noted	71
Table 9. 53 tasks which both professional groups perceive as being performed by 90 percent or more of the Extension 4-H and Youth Leaders	72
Table 10. Number of tasks perceived performed at the 90 percent or above level by both professional groups summarized by duty areas	76
Table 11. Tasks with statistical significant differences when comparing relative amount of time spent	79
Table 12. Summary of tasks with significant differences in relation to relative time spent listed by duty areas	83
Table 13. Tasks with mean scores above average as perceived by the two professional groups in relation to time spent	85
Table 14. Summary of tasks consuming above average amount of time, 5.5 or more, listed by duty areas	90

	Page
Table 15. Tasks which rated 3.5 or lower, based on mean score, on relative time spent	91
Table 16. Summary of tasks consuming a low amount of time, 3.5 or less, by duty area	100
Table 17. Tasks with statistical significant differences when comparing relative criticality	102
Table 18. Summary of tasks with significant differences in relation to relative criticality by duty areas	105
Table 19. Tasks ranked the most critical with a mean score of 7.0 or above by both professional groups	107
Table 20. Summary of tasks with relative criticality of 7.0 or above by duty areas	110
Table 21. Tasks rated below average in relative criticality rank ordered by mean score of Extension 4-H and Youth Leaders	111
Table 22. Duty areas performed with significant differences when classified by position of respondents	115
Table 23. Duty areas performed with significant differences when respondents were classified by number of years in present position	118
Table 24. Duty areas performed with significant differences when classified by educational level completed by respondents	120
Table 25. Duty areas performed with significant differences when classified by type of geographical assignment of the professional Extension 4-H and Youth Leaders	123
Table 26. Analysis of variance and Duncan's test of differences of relative time spent when classified by position of respondents	126
Table 27. Analysis of variance and Duncan's test of differences of relative time spent when respondents were classified by number of years in present position	129
Table 28. Analysis of variance with significant differences of relative time spent when respondents were classified by sex	131

	Page
Table 29. Analysis of variance and Duncan's test of differences of relative time spent when classified by educational level completed by respondents	133
Table 30. Analysis of variance and Duncan's test of differences of relative time spent when classified by type of geographical assignment of the professional Extension 4-H and Youth Leaders	135
Table 31. Analysis of variance and Duncan's test of differences based on relative criticality when classified by position of respondents	139
Table 32. Analysis of variance and Duncan's test of differences based on relative criticality when respondents were classified by number of years in present position	141
Table 33. Analysis of variance and Duncan's test of differences based on relative criticality when classified by educational level completed by respondents	144
Table 34. Analysis of variance and Duncan's test of differences based on relative criticality when classified by type of geographical assignment of the professional Extension 4-H and Youth Leaders	146
Table 35. Summary of respondent characteristics contributing to significant differences in perception of the duty areas of the Extension 4-H and Youth Leaders	151
Table 36. Tasks with associated duty areas which were found to be significantly different for at least two of the hypotheses related to the analysis of the 125 tasks	157
Table 37. Task analysis results	232
Table 38. The numbers, percentages and means of respondents for the 14 duty areas when classified by position of respondents	242
Table 39. The numbers, percentages and means of respondents for the 14 duty areas when classified by number of years in present position	246

	Page
Table 40. The numbers, percentages and means of respondents for the 14 duty areas when classified by sex classification	250
Table 41. The numbers, percentages and means of respondents for the 14 duty areas when classified by educational level completed by respondents	254
Table 42. The numbers, percentages and means of respondents for the 14 duty areas when classified by type of geographical assignment of the professional Extension 4-H and Youth Leaders	258
Table 43. The numbers, percentages and means of respondents for the 14 duty areas when classified by prior experience as a 4-H member	262

LIST OF FIGURES

	Page
Figure 1. Twelve Extension Areas in Iowa	3
Figure 2. Location of professional Extension 4-H and Youth Leaders	5
Figure 3. The twenty counties selected for the study	47

INTRODUCTION

Iowa State University, Iowa's Land Grant Institution, has three major functions: resident teaching, research and extension. The extension function of the university is accomplished by University Extension, a coordinating organization for four identified Extension units. These units include the Center for Industrial Research and Services (CIRAS), Engineering Extension, Office of Conferences and Courses, and the Cooperative Extension Service (CES). This study will be directed to a phase of the largest unit, the Cooperative Extension Service.

Iowa State University's (1976) Cooperative Extension Service has been charged with the task of:

Disseminating among the people of Iowa useful and practical information on subjects relating to agriculture, home economics and rural and community life . . . as provided in the Act of Congress, May 8, 1914, as amended by Public Law 83 of the 83rd Congress. (p. 5)

This task is further amplified by Knowles (1970):

In performing this function, the Extension Service will help youth and adults to: (a) develop their full potential, (b) identify problems and take steps necessary to solve them individually and collectively by utilizing research results when applicable, (c) increase their competency and willingness to assume leadership and citizenship responsibilities, and (d) acquire the ability to achieve higher income and levels of living on a continuing basis. (p. 320)

The CES delivers the research-based information by a wide variety of teaching methodologies through an informal educational program. The target population is the residents of Iowa, who participate

voluntarily, regardless of age, sex, or place of residence.

There are four main components of the Extension Service's voluntary informal educational program: Agriculture and Natural Resources, Home Economics, Community Resource Development and Public Affairs, and the 4-H and Youth Programs. This study will deal with only one of the components, that of the 4-H and Youth Program.

The 4-H and Youth Program

The 4-H and Youth Program is aimed at the 9-18 year old youth of the state of Iowa. 55,731 4-H members and an additional 8,547 youth through special interest groups, were reached by Iowa's 4-H and Youth Programs in 1976.

State-wide program direction and supervision is provided by the State and Assistant State 4-H Leaders. Program implementation is accomplished by professional Extension 4-H and Youth Leaders employed on a single-county, two-county or a multi-county basis.

To facilitate the Extension's educational program, including the 4-H and Youth Program, the Extension Service in 1966 established twelve multi-county areas which encompass the three types of 4-H and Youth Leader positions. Figure 1 provides the configuration of the twelve Extension areas in Iowa.

These twelve areas are combinations of counties, varying from seven to eleven counties in size, based on the functional economic area concept developed by Fox and Kumar (1966). This concept is based around a central city in a geographic area to which the people of the general

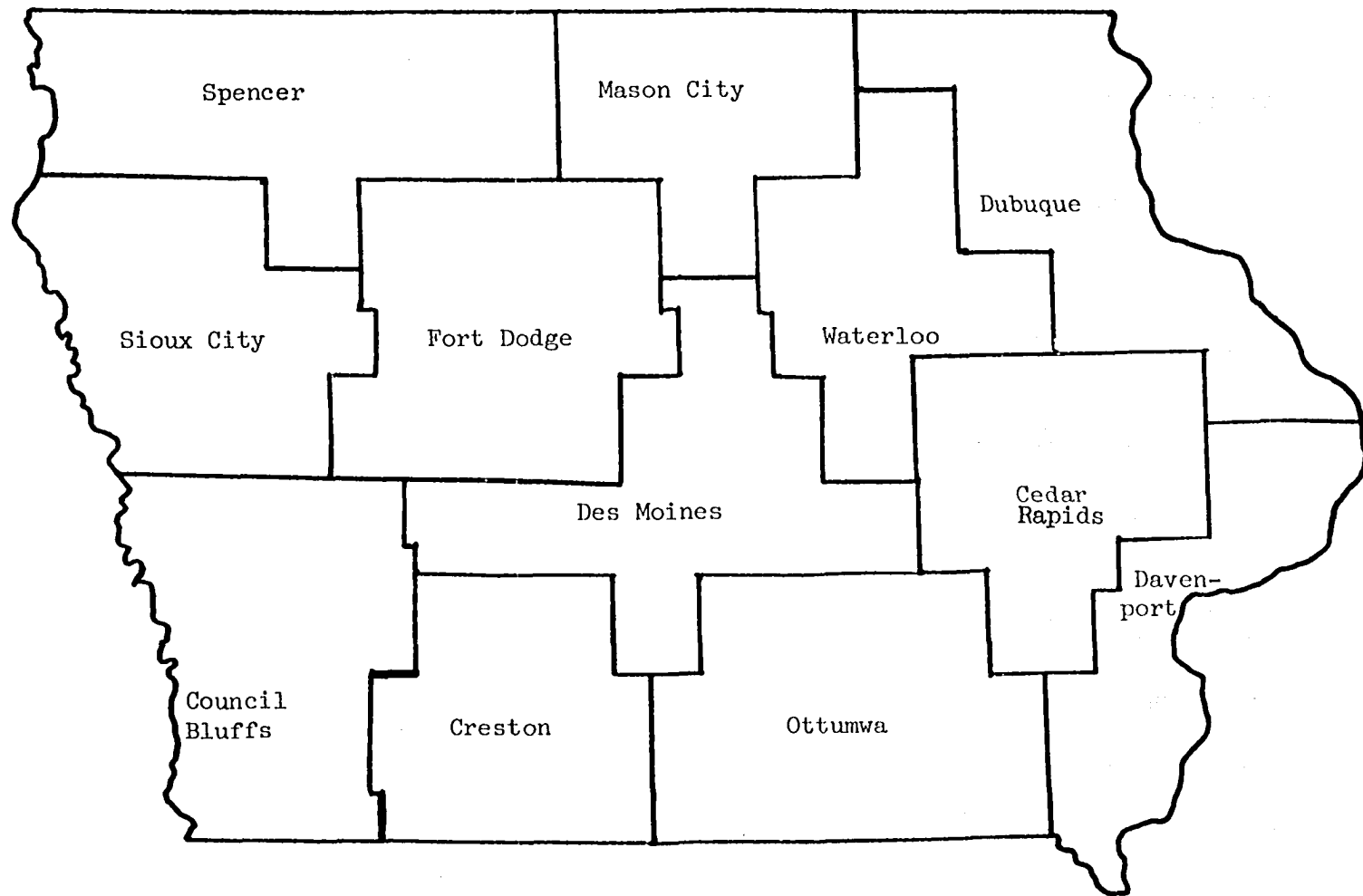


Figure 1. Twelve Extension Areas in Iowa

area are attracted for employment, business, shopping, entertainment and news coverage.

In four of the Extension areas, area-based professionals have been employed and charged with the development of the overall 4-H and Youth Programs in the designated areas. Their efforts are supplemented through the employment of part-time paraprofessionals in each county. Single or two-county professional Extension 4-H and Youth Leaders are employed in the remaining eight areas. In most single- and two-county locations, the professionals do not have paraprofessional assistance. In five of the single-county positions, Extension 4-H and Youth Leaders are employed less than full time. Figure 2 shows the geographic location of single-, two-county and multi-county professional positions.

In each county throughout Iowa there are three groups of volunteers, usually adults, who have direct and continuing involvement with the 4-H programs. The first group is the County Agricultural Extension Council which is responsible for preparing and adopting an educational program for extension work in agriculture, home economics and 4-H club work.

The second group, approved by the Extension Council, upon recommendation of the professional Extension 4-H and Youth Leader, is the County 4-H Committee and/or County 4-H Expansion and Review Committee. This group is responsible for development of organizational and procedural policy for the 4-H club program in their respective counties. Teenagers are sometimes selected and appointed to serve on the 4-H

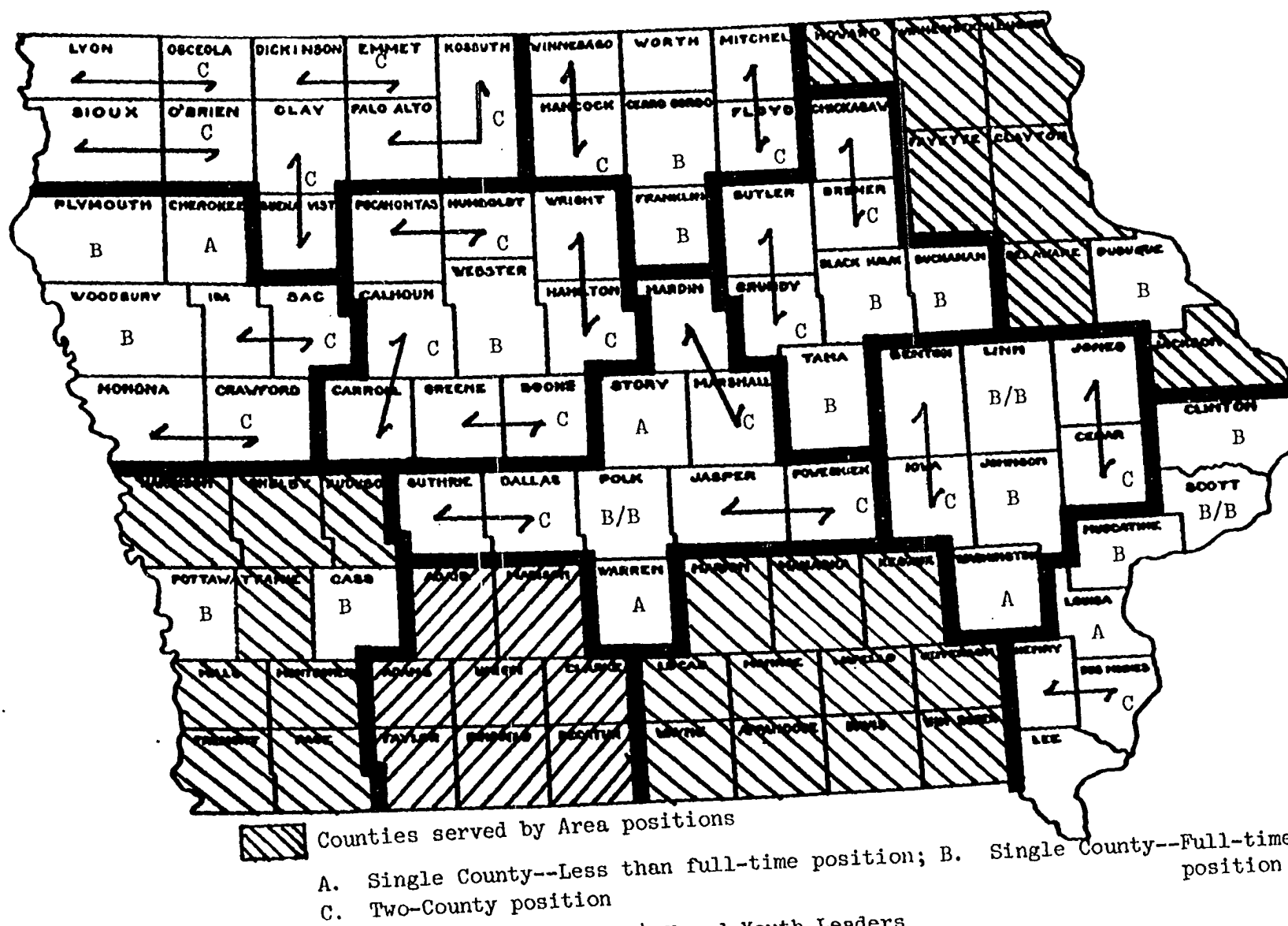


Figure 2. Location of professional Extension 4-H and Youth Leaders

Expansion and Review Committee in many counties.

The third and largest group is the volunteer leaders of the clubs to which the 4-H members belong. The leaders provide guidance to the local 4-H club and instruction in appropriate subject matter to the 4-H club members. Members of all three groups of volunteers are of both sexes, have a wide educational background and may or may not have been a former 4-H member.

Extension 4-H and Youth Leaders are continually involved in adult education, even though the orientation of this program is youth, ages 9-18. Program determination and direction as well as policy formulation are accomplished through intensive work with County 4-H Committees which are composed primarily of adults involved with the 4-H program. The Extension 4-H and Youth Leaders are responsible for training the committee in overall philosophy of the 4-H program and recommending program direction received from the state 4-H staff.

Adult education occurs with a second group, the County Agricultural Extension Council. While responsible for the total Extension program, this group of elected adults are oriented and trained in overall 4-H program direction and philosophy.

The most intensive adult education occurs as the Extension 4-H and Youth Leader instructs and trains the adult volunteer 4-H club leaders. This instruction includes 4-H program philosophy and orientation with additional training provided in broad subject matter, methods and evaluation utilized in the local 4-H club program. Training is also provided in understanding and working with young people and

is utilized by the 4-H club leaders as they help 4-H club members in the local clubs carry out their many activities and projects.

Local clubs are usually based on a relatively small geographic area. The number of clubs and 4-H members vary greatly from county to county throughout Iowa.

Need for Study

The Iowa CES is presently staffed with 25 single-county, 21 two-county and 7 multi-county 4-H and Youth Leader positions. Studies available through the CES Personnel Office show that for the period 1969 through 1976 there has been an annual need to interview and select candidates to fill 15 percent of the Extension 4-H and Youth Leader positions.

This continuing need to replace the professional Extension 4-H and Youth Leader has been under recent study by an ad hoc task force, composed of Iowa CES staff members appointed by the State 4-H Leader.

In other states, factors associated with the length of time a 4-H staff member is employed and reasons for leaving the position have been studied by Rowe (1970), Sabrosky (1958), and Pettys (1970). Parsons and Kiesow (1975) note a possible explanation for the high turnover:

First, youth staff members are encumbered with repetitive and routine tasks that don't require professional expertise. As a result, recruiting and keeping professionals is difficult. (p. 11)

An observation by Robinson (1964) possibly contributes further to understanding the turnover problem of the 4-H and Youth Leader.

No single aspect of Cooperative Extension Service is more highly regarded than 4-H club work. Although 4-H holds

a place of importance and prestige in the minds of most Extension workers, many do not think as well of the position of the professional doing 4-H work as of County Extension positions with other types of responsibilities. (p. 105)

Prior to 1966, Iowa 4-H workers were expected to be promoted to a position dealing with agriculture production two to five years after employment with the CES.

A principle utilized in 1966 in the development of the present Iowa 4-H staffing patterns was an attempt to provide 4-H professional positions with status equal to County Extension Directors and Extension Home Economists.

However, eleven years after the implementation of the twelve-area concept in Iowa, the length of employment of the professional Extension 4-H and Youth Leader has not significantly increased. This is reflected in the turnover rate which for three consecutive years, 1973, 1974, and 1975, has exceeded 12 percent annually. The other types of county positions of the Iowa CES have had a lower turnover rate. The turnover rate has been approximately 10 percent for Extension Home Economists and 3 percent for County Extension Directors. These percentages do not include those staff members retiring from the CES.

The continuing need to replace 12-15 percent of the professional Extension 4-H and Youth Leaders of the Iowa CES annually provides the need for the investigation of this study.

Purpose of Study

Replacing professional Extension 4-H and Youth Leaders raises questions related to the qualifications which should be sought in candidates to fill these positions.

Qualifications of candidates can be stated in many different formats. However, the qualifications should be related to the knowledge, abilities, skills and personal characteristics needed to effectively perform the duties of the position. A review of the literature suggests that the competencies reflected through the knowledge, abilities, skills and personal characteristics must be specifically related to the job performed (Ash and Kroeker, 1975).

The knowledge base upon which the position holder draws, in part, comes from the training received through the baccalaureate and advanced degrees. The Iowa CES differs from many other states in that it does not require a degree in agriculture or home economics, but emphasizes training in the general area of human development for Extension 4-H and Youth Leaders.

This would suggest that there are different job expectations of Iowa Extension 4-H and Youth Leaders as compared to several other states. Therefore, while others, Whaples (1965), Lifer (1966), Robinson (1963), Sabrosky (1958), Brown, et al. (1976), have studied the role of the Extension 4-H and Youth Leader as performed in other states, there is a need to identify the role and the related competencies associated with the position of the Extension 4-H and Youth Leader as performed in Iowa.

The purpose of this study is to conduct a detailed analysis of the role of the single-county and two-county Extension 4-H and Youth Leaders as performed in Iowa.

The general duties and specific tasks associated with the position of the Extension 4-H and Youth Leader will be examined. Perceptions of these duties and tasks will be reviewed by two groups of Extension professionals. The professional groups include: (1) Extension 4-H and Youth Leaders, and (2) their Area and State Administrators in the persons of the Area Extension Directors and the State 4-H Staff. Three volunteer groups will review the broad duties only. These groups are: (1) representatives of the County Agriculture Extension Councils, (2) County 4-H Expansion and Review Committee members and (3) 4-H Club Organizational Leaders.

This study will investigate the following research questions:

1. What are the specific tasks associated with the broad duties performed by Extension 4-H and Youth Leaders?
2. What is the relative amount of time spent by Extension 4-H and Youth Leaders performing each task?
3. How critical are the tasks performed by Extension 4-H and Youth Leaders?
4. What are the broad duties performed by Extension 4-H and Youth Leaders?
5. What is the relative amount of time spent performing each duty performed?
6. How critical are duties performed by Extension 4-H and Youth Leaders?
7. How difficult are the duties performed by Extension 4-H and Youth Leaders?

8. Do the following factors alter the respondents' perceptions of the role of Extension 4-H and Youth Leaders?
 - a. Position of respondents
 - b. Number of years in present position
 - c. Sex classification
 - d. Educational level completed by respondents
 - e. Type of geographical assignment of the professional Extension 4-H and Youth Leaders
 - f. Prior experience as a 4-H member

A national study, funded by the Extension Service, United States Department of Agriculture, is being conducted by the American Institute for Research in the Behavioral Sciences, Washington, D. C. The purpose of the national study is to provide a valid set of personnel selection criteria and a valid performance evaluation system. For the national study, Iowa is one of eight cooperating states providing input into the study of three positions. These positions include County Extension Agricultural Agents, County Extension Home Economics Agents, and County Extension 4-H Agents.

This dissertation and the national study are seen as complementary efforts aimed at providing background information for the development of criteria to be used in selection of professional Extension 4-H and Youth Leaders for the youth of Iowa.

Hypotheses to be Tested

General form of null hypotheses:

1. There is no significant difference between the Extension 4-H Leaders' and their Area and State Administrators' perceptions of the tasks within each duty performed by the Extension 4-H and Youth Leader.
2. There is no significant difference between the professional Extension 4-H and Youth Leaders' and their Area and State

Administrators' perceptions of the relative amount of time spent by the Extension 4-H and Youth Leaders performing the tasks within each duty.

3. There is no significant difference between the professional Extension 4-H and Youth Leaders' and their Area and State Administrators' perceptions of the relative criticality of tasks performed within each duty by the Extension 4-H and Youth Leaders.
4. There is no significant difference in perceptions of the duties performed by the Extension 4-H and Youth Leaders when classified by the selected characteristics of:
 - a. Position of respondents
 - b. Number of years in present position
 - c. Sex classification
 - d. Educational level completed by respondents
 - e. Type of geographical assignment of the professional Extension 4-H and Youth Leaders
 - f. Prior experience as a 4-H member
5. There is no significant difference in perceptions of the relative amount of time spent by the professional Extension 4-H and Youth Leaders accomplishing the duties performed when classified by the selected characteristics of:
 - a. Position of respondents
 - b. Number of years in present position
 - c. Sex classification
 - d. Educational level completed by respondents
 - e. Type of geographical assignment of the professional Extension 4-H and Youth Leaders
 - f. Prior experience as a 4-H member
6. There is no significant difference in perceptions of the relative criticality of the duties performed by the Extension 4-H and Youth Leaders when classified by the selected characteristics of:
 - a. Position of respondents
 - b. Numbers of years in present position
 - c. Sex classification
 - d. Educational level completed by respondents
 - e. Type of geographical assignment of the professional Extension 4-H and Youth Leaders
 - f. Prior experience as a 4-H member
7. There is no significant difference between professional Extension 4-H and Youth Leaders' and their Area and State Administrators' perceptions of the relative difficulty of the duties per-

formed by the Extension 4-H and Youth Leaders.

Definitions

Throughout this study, the following terms are used. The definitions of these terms are as follows:

1. Extension 4-H and Youth Leader: (referred to as County 4-H Club Agent) A professional employee of the CES, appointed by the Director of the CES, responsible for the 4-H and Youth programs.
2. County Agricultural Extension Council: The governing body of the County Agricultural Extension District, composed of one adult from each township in the county selected by the residents of the township for a two-year term. A council member can be re-elected for one additional two-year term.
3. 4-H Expansion and Review Committee (County 4-H Committee): A committee of county residents appointed by the County Agricultural Extension Council responsible for overall direction and policy determination of the 4-H program. The membership includes youth, minority representation if present in the county, and other adults involved with the 4-H program.
4. County Agricultural Extension District: A corporate body, established by the Iowa 56th General Assembly, in each county responsible for the total Extension education program.
5. County Extension Directors: (referred to as County Agents, County Agricultural Agents) A professional employee of the CES, appointed by the Director of the CES, responsible for a specific program area of the CES, usually agriculture and additionally has the administrative responsibilities related to the County Extension Office and County Agricultural Extension District.
6. Extension Home Economist: (referred to as County Home Agent, Home Agent) A professional employee of the CES, appointed by the Director of the CES, responsible for the home economics program area.
7. Area and State Administration: (referred to as Administrators) This term shall be used when referring to the groupings for this study of Area Extension Directors and State 4-H Staff.
8. Area Extension Director: An individual appointed by the Director of the CES, residing in one of the twelve Extension Areas, responsible for personnel and program supervision.

9. State 4-H Staff: Employees of the CES, appointed by the Director of the CES, including the State 4-H Leader and Assistant State 4-H Leaders, responsible for the overall supervision and direction of the Iowa 4-H program.
10. Duty: A grouping of job tasks which contribute to the successful accomplishment of the objectives of the position.
11. Task: An identifiable specific action or series of specific actions which contribute to the accomplishment of a job duty.
12. Relative Criticality: A judgment of the relative importance of performing the task or duty competently in order to do a total job satisfactorily.

Delimitations

As indicated in the earlier portion of this chapter, this study has been limited to the Extension 4-H and Youth Leaders of Iowa who are members of the professional staff of the CES, University Extension, Iowa State University.

The questionnaire which was utilized in a portion of the study was completed by randomly selected members of the County Agricultural Extension District Councils, the Expansion and Review 4-H Committees and 4-H Club Organizational Leaders. There was no attempt to determine the perceptions of the tasks and duties performed by the professional Extension 4-H and Youth Leader held by other adults involved with the 4-H program such as parents of 4-H members, 4-H club project leaders or other professional members of the CES.

With these limitations, the interpretation of the findings from this study must be limited to the Iowa CES 4-H and Youth Leaders.

Organization of the Study

This study has been developed and presented in six chapters. The first chapter is devoted to the Introduction, Need for Study, Purpose of Study, Hypotheses, Definition of Terms, Delimitations, and Organization of the Study.

The second chapter contains a Review of the Literature including a summarization of current perceptions of the tasks and duties performed by the 4-H and Youth Leaders in the CES, the present methodology for conducting job analysis and review of the concepts of validity as applied to job analysis.

The third chapter discusses the instruments used and the sampling procedures utilized with the three lay volunteer groups. The procedures utilized in collecting and treating the data are also discussed.

The fourth chapter contains the findings of the study and a discussion of these findings.

The fifth chapter presents conclusions, recommendations and suggestions for further research as determined by this investigator.

The sixth chapter presents a summary of the study.

REVIEW OF LITERATURE

Introduction

"A number of studies make it clear that there is not general agreement as to the role of the County Agent doing 4-H work."

(Robinson, 1964, p. 112) As reported earlier, the position of the professional Extension 4-H and Youth Leader has been under frequent study in other states. A study of the tasks and duties performed by the Iowa Extension 4-H and Youth Leader has not been previously performed.

In preparation for this study of the tasks and duties of the Extension 4-H and Youth Leader performed in Iowa, three related topics will be reviewed and discussed in this chapter.

Section one reviews prior studies related to the professional Extension 4-H and Youth Leader. Section two deals with the concept and process of job analysis, and the final section reviews the concept of validity and its application to job analysis.

The Role of the Extension 4-H and Youth Leader

The studies conducted in other states have used different procedures to examine the tasks and duties of the Extension 4-H and Youth Leader position.

Using role concept, Wilkening (1957) studied three agent categories: Agricultural Agents (County Extension Director), Home Agents (Extension Home Economist), and 4-H Agents (Extension 4-H and Youth

Leader). One of Wilkening's objectives was to describe the role of county extension workers as perceived by themselves in respect to the content of their program, the types of activities performed, and relationships to other persons and groups within and outside of the Extension Service. In conducting the study, Wilkening identified and defined nine activities typically performed by Extension workers.

His identified activities were:

1. Providing information directly
2. Training local leaders
3. Organizing and coordinating clubs
4. Advising and consulting groups in the county
5. Acting as secretary and other services for associations, fairs, etc.
6. Public relations
7. Coordinating university and USDA programs
8. Program planning
9. Administration

Wilkening found that the 4-H agents emphasized three activities: organizing and coordinating clubs, training local leaders, and providing information directly.

Home Agents and Agricultural Agents emphasized three types of activities in defining their roles. These were: providing information directly, training local leaders, and program planning. While the main activities were the same, the Home Agents rank ordered the three activities differently from the order of the Agricultural Agents.

Wilkening found that all agent groups had a relatively low agreement level between what they thought important and what they spent their time doing. Wilkening stated:

The County Extension Agent is influenced strongly in what he does by local interests, although these interests are not

necessarily compatible with the ideal definition of his role. (p. 47)

He concluded his study by noting:

A hypothesis is suggested that persons in intermediate positions such as county extension workers will tend to conform to the expectations of those with whom they work at the local level or with those at higher levels, depending upon the nature of rewards they are seeking and upon their control of relationships at the respective levels. (p. 49)

A study by Robinson (1964) was conducted in Wisconsin to gain a clearer concept of the role of the County 4-H Club Agent. Respondent groups in the Robinson study included:

1. State agricultural, home economics and 4-H club district leaders who comprise the supervising teams
2. County agricultural, home, and 4-H club agents on the County Extension staffs
3. Presidents, vice presidents and secretaries of county adult leaders' organizations
4. State supervisory staff, county extension staff and the officer group of the county leaders' organizations

A broader classification of the role of agents in 4-H was developed and used. Four areas of responsibility were identified:

1. Planning and evaluating the county 4-H programs
2. Organizing and promoting local clubs, county events and activities
3. Providing instruction and educational information to leaders and members
4. Rendering personal service to individuals, clubs and organizations

Robinson found that there were significantly different perceptions among the three respondent groups as to the perceptions of the role of the County 4-H Club Agent.

There was agreement among Extension Agents, Extension Supervisors and lay leaders that role number one, as defined by Robinson,

planning and evaluating the county 4-H program, was the most important; and role number four, rendering personal service to individuals, clubs and organizations, was the least important.

For the other two responsibilities there was less agreement. Supervisors and agents agreed that instructional activities should be more important than organizational activities. But leaders felt that organizational activities ought to remain dominant.

When type of county, more rural versus more urban, was considered, Robinson found inconclusive responses. He stated:

There appeared a general pattern that agents in type three (more rural) counties were expected to give more importance to instructional activities than those in type one (more urban) counties. (p. 157)

Robinson asked the respondent groups to evaluate ten job activities which comprised each of the four aspects under study of the role of the County 4-H Club Agent. In this section of his report he drew the following implications:

Within each of the four role aspects, there was lack of agreement among respondent groups as to relative importance that should be accorded various activities. (p. 153)

However, there was general agreement that most activities comprising the planning and evaluation and instructional aspects should be accorded more importance and that activities comprising the organizational and personal service aspects should be accorded less importance.

Of the ten activities which comprised the planning and evaluation responsibility, all respondent groups agreed that "work with program planning committees" was one of the most important of the job activities.

When looking at the activities comprising the instructional aspects of the position, Robinson found that the County 4-H Club Agent and Agricultural Agent felt more importance was already being given to these activities than did other respondents.

Robinson stated that "there was less agreement between the respondent groups with respect to the activities comprising the organizational aspect than in any other." (p. 154) He further found "that all respondent groups agreed that activities comprising the personal service aspect should be given less importance than they perceived each as now receiving." (p. 155)

Lifer (1966) studied the role expectations of Area 4-H Agents by comparing three respective groups: Advisory Committee Members, County Agents and State Administration. This study was directed at analysis of the role expectations of the professional Area Extension Agent, 4-H, responsible for implementation of the 4-H and older youth program development in the six-county area around McConnelsville, Ohio.

Five categories of tasks used in the study were:

1. County 4-H program
2. Multi-county 4-H program participation
3. State 4-H program involvement
4. Orienting and training county agents
5. 4-H publicity

Each of these tasks was further defined with a series of items, 41 in total, which the area extension agent, 4-H may or may not do.

Lifer summarized his findings by stating:

1. Respondents generally felt the Area Agent, 4-H, should assist the County Agents in planning county 4-H programs
2. The Area Agent, 4-H, should assist County Agents in conducting 4-H educational activities.
3. Evaluating multi-county 4-H programs and meetings was rated high by the respondents
4. Developing and maintaining an effective area 4-H Advisory Committee and involving the committee in planning and conducting Area 4-H programs was given high priority
5. Area 4-H Agents should assist in conducting state planned 4-H training programs on the area basis
6. The Area Agent, 4-H, should meet with County Agents every two or three months to discuss area 4-H programs
7. Area 4-H Agents should keep County Extension Agents informed on what is going on in all phases of the area 4-H program
8. Area 4-H Agents should send all newsletter, radio and newspaper articles directly to the media involved and not through County Agents (p. 51)

The critical incident technique was used with a fourteen-state study by Gogen (1971). Iowa was not included in the study. Gogen noted that by using the critical incident technique he could study the behavior of youth agents from their viewpoint as they performed their jobs. He classified 1,425 incident reports into ten critical tasks performed by the 4-H Agents. These ten tasks were classified into five areas which provide a general view of the important tasks of youth agents. The five areas and the distribution of critical incidents according to the critical tasks are:

- | | |
|--|-----|
| 1. Program development and execution | 47% |
| 2. Individual help and counseling | 21% |
| 3. Organization. | 21% |
| 4. Interpersonal relationships | 7% |
| 5. Public relations. | 2% |

Critical incidents related to the tasks of planning and conducting programs accounted for 39 percent of the program development and execution area. Critical incidents defined as assisting with

personal development accounted for 12 percent of the critical incidents included in the individual help and counseling area.

Gogen analyzed critical social conditions to determine what factors may qualify conditions or give direction to the Extension 4-H Youth Agent's job. This study showed agents in various states emphasized different components as critical to their respective jobs. California agents reported their jobs as educational administration while Mississippi and Louisiana youth agents saw the critical aspects of their work environment as that of helping and counseling individual members, such as a tutor.

Gogen concluded his study by calling for training in the behavioral sciences to deal with the critical components of the Extension 4-H and Youth work environment.

Related Role Studies

Harrison (1975) conducted a study to consider job functions and the degree of importance of Extension Home Economists' (EHE) role in Iowa. Fifty-six job functions were evaluated and ranked by EHEs and Home Economics Program Committee members.

In this study, Harrison found many similarities and some significant differences in perceptions of importance of job tasks. For both respondent groups, providing accurate and reliable information was the most important function. Harrison reported significant differences were noted in the following three areas:

1. 4-H Functions
 - a. Attend local and 4-H club meetings to get acquainted with 4-H girls

- b. Chaperone 4-H members to state events
- c. Judge 4-H home economics project records
- d. Assist 4-H and Youth Leader or Department Superintendent in organizing 4-H projects for county fairs and for area events
- e. Hold home economics subject matter meetings for 4-H members

For each of the above five functions, the mean score of home economics committee members was significantly higher than the mean score for EHEs.

- 2. Service Functions--where committee members place a higher mean score on consistent office hours while EHEs were higher for providing answers to questions through phone requests and visits to get acquainted with homemakers
- 3. Teaching Functions--where more traditional teaching functions such as programs for organized groups and leader training had a higher mean score for committee members than for EHEs

However, mass media for teaching and instructional teaching were two items with a significantly higher mean score for EHEs than for committee members.

Harrison reported that correlations of EHEs' role perception with the factors of age, length of service in Extension, department of study and degree held showed no influence on the EHEs' role perception on the level of importance for various job functions. Similarly, Harrison concluded that a committee member's age, residence, length of service on the committee, family income and community participation did not influence her perception on the degree of importance of various job functions of the EHE.

Parsons and Kiesow (1975) and the North Carolina Extension Service, through a panel of experts, identified fifty tasks appropriate for the role of 4-H program assistants. They define program assistants as:

Usually full or part time, trained, indigenous adults hired to work in their own neighborhoods under the supervision of a

professional. . . . These assistants release professionals from time-consuming routine tasks and act as a bridge between families in the community and Extension. (p. 12)

The fifty tasks were distributed in six functional categories of:

1. Maintenance--activities related to support, supervision and program renewal
2. Needs--activities related to needs identification and analysis
3. Planning--activities related to selecting program objectives and organizing learning activities
4. Execution--activities related to implementating, mobilizing and monitoring teaching and learning experiences
5. Evaluation--activities related to measuring the effectiveness

Following an eighteen-month test, Parsons and Kiesow concluded that the fifty tasks included in the ideal model were generally perceived as appropriate by the professionals, paraprofessionals and volunteer leaders.

Summary of Role Studies

In the studies reviewed, the participants in each study were limited to an evaluation of a relatively small number of duties or functions suggested as part of the role of the Extension 4-H and Youth Leader. The limitations of a few duties resulted in the use of very broad general statements of duties which encompassed many different tasks. The studies indicated that the following tasks/duties/functions were considered important components of the job of the professional Extension 4-H and Youth Leader.

1. Planning and evaluating the County 4-H program, including work with the program planning committee
2. Organizing and coordinating clubs
3. Providing information directly
4. Training local leaders

One study suggested that the rendering of personal service was

the least important. However, Harrison's study, conducted in Iowa, found that the lay volunteers indicated an expectation of this type of activity, particularly as it relates to the 4-H program.

In addition to being limited to few response items, several of these studies were conducted under different staffing arrangements than Iowa, so the role expectations could be expected to differ.

Wilkening reported that either local program participants or higher organizational level staff have an impact on the role performed. Harrison reported that there were differences between staff and local volunteers, but that this difference was not related to a number of sociological factors such as age, location of residence, length of service on committee, family income and community participation.

Job Analysis

The identification of the tasks and duties which are normally included in a position assigned to an individual is a process of job analysis.

"Job analysis is neither new nor particularly unique." (Rouleau and Krain, 1975, p. 300) Over the years a variety of methodologies have been developed to analyze what an individual does and how an individual accomplishes the assigned task. Most methods look at what is accomplished by the job (output) or how the job is accomplished (process).

The U. S. Department of Labor (1972) states:

Job analysis involves a systematic study of the worker in terms of:

1. What the worker does in relation to data, people and things

2. The methodologies and techniques employed
3. The machines, tools, equipment and work aids used
4. The materials, products, subject matter, or services which resulted
5. The traits required of the worker (p. 91)

In considering job analysis, Walsh and Hess (1974) reported:

The Equal Employment Opportunity Commission (EEOC) Guidelines (1970) don't specify any particular method of job analysis, but do suggest what components should be considered. The job analysis is to be based on:

1. Those job duties which are actually performed by the employees currently on the job
2. The critical nature of each job duty
3. The degree of difficulty of each job duty
4. The situation and conditions under which the job duties are performed (p. 841)

Revised guidelines on Testing and Employees Standards Instructions, United States Civil Service Commission (USCSC) (1976) state:

Where a job analysis is required the report should include either

1. The important duties performed on the job and the basis or which such duties were determined to be important, such as the proportion of time spent on the respective duties, their level of difficulty, their frequency of performance, the consequences of errors or other appropriate factors, or
2. The knowledge, skills, abilities or other worker characteristics and bases on which they were determined to be important for job performance (paragraph 3890.13-b[3])

These requirements mandate an employer to look at the broad area of job analysis and the closely related area of validity of the procedure used. There are important benefits which occur to the employer, the job applicant and employee through the job analysis procedure, as well as complying with the laws of the land.

Spencer (1974) suggests the following advantages:

1. It can provide a better job fit . . .
2. Produce a more rational set of expectations of job performance for both superior and subordinate
3. Supply a more knowledgeable takeoff point for performance appraisal
4. Lay a foundation for a better relationship between job incumbent and his superior
5. Be extremely useful for counseling purposes (p. 431)

Job analysis can be accomplished using several different types of procedures. McCormick, Jeanneret, and Mechom (1972) provides a general criticism of the job analysis field by stating:

In general terms, the field of job and occupational analysis has not benefitted substantially from the scientific systematic approach that has characterized other domains. (p. 347)

While many procedures are available for conducting the process of job analysis, the U. S. Civil Service Commission's rules entitled Testing and Employee Standards Instructions states:

Any method of job analysis may be used if it provides the information required for the specific validation strategy used. (paragraph 3890.12-a)

A comprehensive scheme for describing work is the Functional Job Analysis Model which has been developed by Fine (1967). Fine defines the model as follows:

Functional Job Analysis distinguishes between what gets done--the what/how of technology concerned with machine, tools, techniques, processes, and end results--and what the worker does--the what/how of the worker's physical, mental, and interpersonal activity. "What gets done" categories are referred to as work fields; "What the worker does" categories are referred to as worker functions. (p. 7)

The "What the worker does" is done in relation to three areas or primitives: data, people and things. Fine and Wiley (1971) explains the content of the three primitives as, "In relation to things, workers

PLEASE NOTE:

Print on some pages is small
and indistinct. Filmed in the
best possible way.

UNIVERSITY MICROFILMS.

1. It can provide a better job fit . . .
2. Produce a more rational set of expectations of job performance for both superior and subordinate
3. Supply a more knowledgeable takeoff point for performance appraisal
4. Lay a foundation for a better relationship between job incumbent and his superior
5. Be extremely useful for counseling purposes (p. 431)

Job analysis can be accomplished using several different types of procedures. McCormick, Jeanneret, and Mechom (1972) provides a general criticism of the job analysis field by stating:

In general terms, the field of job and occupational analysis has not benefitted substantially from the scientific systematic approach that has characterized other domains. (p. 347)

While many procedures are available for conducting the process of job analysis, the U. S. Civil Service Commission's rules entitled Testing and Employee Standards Instructions states: :

Any method of job analysis may be used if it provides the information required for the specific validation strategy used. (paragraph 3890.12-a)

A comprehensive scheme for describing work is the Functional Job Analysis Model which has been developed by Fine (1967). Fine defines the model as follows:

Functional Job Analysis distinguishes between what gets done--the what/how of technology concerned with machine, tools, techniques, processes, and end results--and what the worker does--the what/how of the worker's physical, mental, and interpersonal activity. "What gets done" categories are referred to as work fields; "What the worker does" categories are referred to as worker functions. (p. 7)

The "What the worker does" is done in relation to three areas or primitives: data, people and things. Fine and Wiley (1971) explains the content of the three primitives as, "In relation to things, workers

draw on physical resources; in relation to data, on mental resources and in relation to people, on interpersonal resources." (p. 78)

Within each of these primitives, Fine has developed a hierarchy of functions which proceed from simple to complex functions. These three hierarchies allow for two measures of a job, level and orientation.

Fine and Wiley (1971) states:

Functional Job Analysis is probably three things:

1. A conceptual system defining dimensions of work activity and thus a way of conceiving the world of work
2. An observational method and thus a way of looking at people at work
3. A method of analysis--of evaluating the design of work and its performance (p. 77)

Prien and Ronan (1971) have criticized Fine's method in stating, "The method does not provide the means to describe jobs in normative terms. The main use is to identify job families and what are essentially occupational promotional ladders." (p. 379)

Another job analysis approach described by Prien and Ronan is that of worker-oriented task analysis. They comment, "This approach goes directly to the human operator performance acts, or what the worker does to accomplish the task objective." (p. 378) Prien and Ronan's approach has at least two supporting reasons for its use.

(1) The worker-oriented analysis tends to be limited to behaviors related to organizational goals in that retention of items at some point in the analysis depends on validity as determined by an organizationally prescribed criterion. (2) Higher-level positions ordinarily involve complex and nonobservable behaviors (cognitive) as compared to the psycho-motor response of the manual trade jobs.

Chapple and Sayles (1961) have suggested four ways of describing managerial work:

1. Narrative descriptions of what, how and why
2. Work flow (process description)
3. Patterns or clusters of activities
4. Time and/or priority of specific acts

They also noted from a research standpoint that the activity pattern or cluster method, including the time priority technique, appears to be most promising to provide meaningful results in describing managerial work.

Rouleau and Krain (1975) have reviewed the various approaches of job analysis and the many terms used to describe the process of job analysis, and in doing so have suggested that the method of labeling does not determine the adequacy of a particular job analysis. They continue by stating:

We believe a job analysis study should as a minimum identify the major duties in their relative order of importance to success on the job and frequency; and the skills, knowledge and abilities (SKAs) and personal characteristics (i.e., personality constructs such as tact, enthusiasm, etc.) associated with each of the major duties. Physical demands, environmental conditions and levels of supervision provided or given should also be identified. (p. 301)

A very similar approach is suggested by Livy (1975). He states:

To provide a framework on which to structure both the analysis and the information obtained, it is useful to look at the job from two points of view; first, the duties and responsibilities entailed; second, the skills and personal attributes necessary for the successful execution of that job. (p. 47)

Livy's process includes the following steps:

1. Identify and isolate, for the purpose of the study, the component tasks in a job . . .
2. Examine how tasks are performed . . .
3. Examine why tasks are performed as they are

4. Examine when and why tasks are performed
- 5a. Identify the main duties involved, both regular and occasional
- 5b. Scale the main duties according to their difficulty, frequency and importance to the job as a whole
6. Identify the main areas of responsibility
7. Note the prevailing working conditions, in respect of the physical, social and financial aspects of the job . . .
8. Identify the personal demands which a job makes on an individual incumbent

Demands can be categorized with the following criteria:

- a. Physical demands
- b. Intellectual demands
- c. Skills
- d. Experience
- e. Personality factors
 - (1) Ability to work through other people
 - (2) To provide leadership
 - (3) To work without close supervision
 - (4) To possess a degree of extroversion
 - (5) The kind of temperament to cope with dull routine procedures (p. 48)

Goodale (1976) provides additional suggestions to the field of job analysis for use in personnel selection. He states:

Therefore, they should start with the job (or family of jobs in prescreening interviews) by conducting a job analysis and identifying areas of performance which, taken together, constitute the job (this is the desired behavior). . . . These areas of performances are behaviors such as: applies technical knowledge and skills; interacts well with peers, subordinates, clients; plans and organizes work, people, things; and supervises others. Notice that each example focuses on what the job holder does rather than what he is. (p. 65)

Summary of Job Analysis

There are a variety of methodologies that have been developed and can be used in the process of job analysis. Most of these procedures look at what the worker does in relation to data, people and things; or how the worker accomplishes the job.

The EEOC and the USCSC suggest that as job analysts look at positions or jobs, the following factors should be included in the analysis:

1. Major job duties actually performed
2. The critical nature of each job duty performed
3. The degree of difficulty of each duty performed
4. The amount of time spent or the frequency of performing each duty
5. The knowledge, skills, abilities and other characteristics which are important for job performance
6. Situations or conditions under which the duties are performed

The exact method of job analysis utilized is not of major concern. What is important is that job analysis must look at the job being performed by the incumbents.

As Rouleau and Krain (1975) state, "The challenge to analysts and selection specialists is to produce credible reports on which job related, valid and reliable selection processes can be used." (p. 304)

In addition to providing the basis for improved selection procedures, a number of other advantages to sound job analysis have been identified. With good job analysis, both the supervisor and the subordinate have clearer expectations of what is expected to be accomplished.

Job analysis information can be used by the supervisor for improvement in the performance evaluation procedure as well as helping and counseling with the job incumbent.

At least one advantage resulting from job analysis has been identified. The information developed through job analysis can be used to more fully match an employee's knowledge, ability, skills and other characteristics to the needs of a job. This improved matching results in a more productive employee.

Validity of Selection Procedures

The need for objective job analysis and valid selection procedures has been made by pronouncements from the Courts of the United States and many federal agencies. This section will review the concept of validity as it relates to job analysis leading to personnel selection procedures.

Validity has been defined by the EEOC as the extent to which a test measures the trait for which it is designed, or for which it is being used, rather than some other trait.

The U. S. Civil Service Commission stated in Testing and Employer Standards Instructions (1976) that:

For the purposes of satisfying these guidelines users may rely upon criterion selected validity studies, content validity studies or construct validity studies. (paragraph 3890.05-a)

Criterion related validity has other forms of identification. The American Psychological Association (APA) (1975) equates criterion related validity with predictive or concurrent validity.

The criterion related (predictive) strategy of validation has as its basic purpose to predict future behavior, measured by a criterion. Bassford (1974) calls this the superior method for establishing the validity of a selection device. This strategy "requires that all applicants be administered the measure and all subsequently be hired without regard to their scores." (p. 42) After a period of time, the observations made of job performance would be correlated with the selection measures. Bassford continues, "If a high correlation is found the measure has predictive validity; it provides the 'meaningful' relationship required by law and good practice and will allow the

manager to improve his selection success rate." (p. 42)

There are at least two obvious problems with this procedure. The first is the time necessary to measure job performance after hiring and secondly, the potentially wasteful aspects from the employer's standpoint in view of improper job-employee fit.

Construct validity, according to Bassford, provides this information:

The process involved is difficult to understand, but there are four general steps in establishing validity of this type. The first step is to propose that a test measures a trait that the researcher feels is important. . . . The second step is to theorize that the trait being measured is important from the standpoint of studying the behavior that the researcher feels is appropriate in given situations. In the third step the researcher must predict the relationship between the scores on the trait that he purports to be measuring and the behavioral characteristics that he thinks will be exhibited. The fourth step is to secure empirical data that can be used to either confirm or reject the presence of the predicted relationship. (p. 44)

This strategy has been labeled as the most complex of the three and generally not considered to be practical for most employers.

According to the APA:

The content validity of a test is the degree to which scores on a test may be accepted as representative of performance within specifically defined content domain of which the test is a sample. (p. 9)

U. S. Civil Service regulations state the following regarding content validity:

There should be a definition of a performance domain or the performance domain with respect to the job in question. . . . Performance domains shall be defined on the basis of competent information about job tasks and responsibilities. Performance domains include critical or important work behaviors, work products, work activities, job duties, or the knowledges, skills or abilities shown necessary for performance of the duties, behaviors, activities or the production of work. (paragraph 3890.12-c[1])

An operational definition of content validity has been offered by Lawshe (1975). He states, "Content validity is the extent to which commonality or overlap exists between (a) performance on the test under investigation and (b) ability to function in the defined job performance domain." (p. 566)

Lawshe continues his description of content validity by stating, "Content validity is the extent to which members of a content evaluation panel perceive overlap between the test and the job performance domain. Such analyses are essentially restricted to (1) simple proficiency tests, (2) job knowledge tests and (3) work sample tests." (p. 566)

Content validity differs from other forms of validity in that it is a nonstatistical procedure which can be used effectively. It also satisfies the civil rights requirements related to personnel selection procedures.

The use of content validity procedures is becoming more widespread in the personnel selection area. The other forms of validity are more rigorous in their approach and methodology. Several factors restrict their overall usefulness. Lawshe (1975), supported by Sharf (1975), points out, "Pressed by legal requirements to demonstrate validity and constrained by the limited applicability of traditional criterion related methodologies, practitioners are more and more turning to content validity in search of solutions." (p. 563)

Menne, McCarthy and Menne (1976) have stated the necessity of turning to content validation strategy: "It is becoming apparent that

content validity strategy is the only validation strategy that is practical in many public employment selection situations." (p. 387)

The APA (1975) makes the following comments related to content validation strategy:

1. The job content domain to be sampled should be defined. That definition should be based on an understanding of the job, organizational needs, labor markets, and other considerations leading to personnel specifications and relevant to the organizational purposes. (p. 9)
2. A content domain should ordinarily be defined in terms of tasks, activities, or responsibilities. The principle here is that the domain be defined principally in terms of activities or consequences of activities which can either be observed or be reported by the job incumbent. (p. 10)
3. Sampling of a job content domain should assure the inclusion in a measure of the major elements of the defined domain. Random sampling is probably inappropriate unless done within systematically sample areas of "sub domains." (p. 10)
4. Panels of experts used in any aspect of the development of tests defended on grounds of content validity should be clearly qualified. (p. 11)

The APA defines a panel of experts as people with thorough knowledge of the job. This panel of experts concept has been addressed by Bassford (1974). He states, "The process relies for its validity on the judgment of experts in a given field." (p. 43) Lawshe (1975) supports Bassford by stating that for the best results a panel of persons knowledgeable about the job, composed of an equal number of incumbents and supervisors should be used. (p. 566)

The assumptions underlying the use of content validity have been articulated and discussed by Lennon (1956). He identifies the following assumptions:

1. The area of concern to the tester can be conceived as a meaningful definable universe of responses.
2. A sample can be drawn from this universe in some purposive meaningful fashion.
3. The sample and the sampling process can be defined with sufficient precision to enable the user to judge how adequately the sample performance typifies performance on the universe.
(p. 298)

The use of content validity relies on a thorough job analysis preceding the validity study. Sharf (1975) states "The key to content validity is in recognizing that as a sampling strategy, it always requires that the job be analyzed first. Without information developed from a job analysis, there is no way to judge whether frequent or critical behaviors are, in fact, being sampled by the test." (p. 57)

Sharf continues by stating, "A judgment as to the adequacy of a claim of content validity is based on examination of the series of operations that must be performed: (1) In describing a job, using job analysis and (2) Showing how the knowledge, skills and behaviors on a test are samples of the required job performance." (p. 57)

Until recently there has been a problem with the concept of content validity. Ash and Kroeker (1975) points out, "Although content validity has been one of the three main approaches to test validation included in the APA standards, and has been set forth as a permissible approach to validation in both OFCC and EEOC regulations, literature on a relevant methodology for demonstrating its existence is practically nonexistent." Robertson (1975) issues a call for a "step-by-step description of the validation process with specific examples of appropriate and inappropriate methods." (p. 484)

Such a procedure has been developed and articulated by Menne, McCarthy and Menne (1976) in what they call "a system approach to the content validation of employee selection procedures." They have developed a ten-step procedure supported by extensive computer-based clerical support for implementing their systems approach to content validity.

A procedure similar to the Menne, et al., process has been developed by Otteman and Chapman (1977). Their methodology which is designed to produce a content valid study includes the following steps:

1. Gather preliminary information.
2. Select a panel of subject matter experts to review and develop job tasks.
3. Identify all tasks essential for job performance (task inventory).
4. Identify from the task inventory, and list, the significant knowledge, skills and abilities.
5. Distribute a questionnaire to each of the "subject matter experts" who in turn rates each task statement according to: task performance, relative time spent, criticality/consequence of errors, extent necessary upon job entry and relationship to successful performance. (p. 4)

Summary of Validity

The need for developing valid personnel selection procedures is clear if an employer (particularly a large employer or public employer) is to comply with the laws of the United States. Principles have been developed for the validation of personnel selection procedures. The APA (1975) has identified three axioms that underlie the application of these principles.

These axioms are:

1. Individuals differ in many ways.
2. Individual differences in personal characteristics and backgrounds are often related to individual differences in behavior and satisfaction on the job.
3. It is in the best interest of organizations and employees that information about relevant differences between people be developed and used in assigning people to jobs. (p. 2)

Three strategies are available to employers to validate personnel selection procedures. However, most employers have found that the length of time and the potential of improper employee-job match involved in criterion related validation makes this strategy impractical.

The employers have also found the complexity of the construct validation strategy too great to use in validating personnel selection procedures.

The elimination of the predictive and construct validation strategies has left employers with content validation, a procedure that is based on a panel of experts' knowledge about the job under study and looks at the critical and frequent behaviors performed as a part of the job and not a set of criteria. Lennon (1956) stresses "Content validity is ascribed to the subject's responses rather than to the test questions themselves." (p. 296)

Procedures based on the assumptions of content validity have only recently been developed. The different procedures developed by Menne, et al., and by Otteman and Chapman will provide increased utilization of this concept, particularly among the public sector employers.

Chapter Summary

Employers are faced with increasing numbers of rules and regulations related to employee selection procedures. The Civil Rights Act of 1964 was established as Bassford (1974) states, "To achieve equality of employment opportunity for all people and to remove artificial barriers for minority group members The key concern should be finding the most qualified employees for the jobs that are open." (p. 46)

To meet these expectations employers are faced with the development of valid personnel selection procedures.

Three strategies, predictive, construct, and content validity, have been identified as appropriate strategies for employers to utilize. Most employers are finding that only the nonstatistical, content validity strategy is practical for them to utilize. Appropriate procedures for establishing content validity have only recently been developed. As a key element in the establishment of content validity, an analysis of the job must be conducted.

Previous studies of the Extension 4-H and Youth Leader have generally been limited to an analysis of very broad and general areas of responsibility. These studies have shown the following areas as important aspects of the professional role of the Extension 4-H and Youth Leader:

1. Planning and evaluating the County 4-H program
2. Organizing and coordinating clubs
3. Providing information directly
4. Training local leaders

After consideration of the alternatives, this study has been based on the following framework for job analysis. The analysis must identify from those knowledgeable about the job:

1. Major duties actually performed
2. Critical nature of each duty performed
3. Degree of difficulty of each duty performed
4. Amount of time spent or frequency of performing each duty
5. Knowledge, skills, abilities and other characteristics which are important for job performance and not learned on the job

Therefore, this study has been designed to provide a content valid base, through job analysis, for the development of a valid personnel selection procedure for Extension 4-H and Youth Leaders employed by the Iowa Cooperative Extension Service.

METHODS OF PROCEDURE

Introduction

This study was designed to identify the tasks and duties performed by the professional Extension 4-H and Youth Leaders in Iowa. In addition, a determination of the perception of the relative amount of time spent performing the tasks and duties and the relative criticality of performing the tasks and duties was made. An additional determination was made of the relative difficulty of the duties performed. An attempt to relate any identified differences to descriptive variables was also made.

The perceptions of the performed tasks and/or duties of the professional Extension 4-H and Youth Leader were obtained from five groups directly involved in the 4-H and Youth program. The five groups include:

1. Extension 4-H and Youth Leaders
2. Area and State Administrators
3. County Agricultural Extension Council members
4. 4-H Expansion and Review Committee members (County 4-H Committee)
5. 4-H Club Organizational Leaders

This chapter describes the methods and procedures utilized in this study. This chapter is organized into the following sections: (1) Instruments used in the study, (2) Population and sample determination, (3) Collection of data, and (4) Treatment of data.

Instruments Used in the Study

Two instruments were used in this study. The professional staff, as part of a national study, completed a lengthy questionnaire developed by the American Institute of Research (AIR) (Appendix A). Under the direction of AIR, fourteen professional field staff and three area extension directors were involved in the preliminary identification of tasks and duties of County Extension workers. Extension staff members from seven other states were also involved in this process. AIR collected critical incidents and utilized the Position Analysis Questionnaire (1969) to identify tasks and duties which could be considered a part of a County Extension worker's position.

A draft of the preliminary questionnaire was reviewed by administrators of eight State Extension Services involved in the AIR directed study. Additional tasks which had not been included in the preliminary questionnaire draft were suggested to AIR by this investigator and others from Iowa.

The final questionnaire included four sections. These sections were:

1. Agent background data
 2. One hundred twenty-five tasks listed under fourteen duty areas
 3. Listing of fourteen duty areas
 4. Listing of knowledge, ability, skills and personal characteristics which the field staff were asked to evaluate as necessary to successful accomplishment of this position.
- Section four was deleted from this study.

The second questionnaire used in this study, which was developed by this investigator, was an adaptation of the professional staff questionnaire. Two types of questionnaires were tested with a

representative group of Extension Council members, 4-H Expansion and Review Committee members and 4-H Club organizational leaders from three counties in Iowa.

The first test questionnaire was identical to the questionnaire utilized with the professional staff. The test group indicated that lay volunteers would not and/or should not be expected to complete a questionnaire that would take at least four hours of their time. This form was dropped from consideration for use with the lay volunteer respondent groups.

The second test form was section three of the professional questionnaire. Added to section three was a listing of the tasks which could be considered representative of the fourteen duty areas.

The test group of lay volunteers suggested that the column dealing with relative difficulty of duty be deleted from the questionnaire before distribution to the volunteer respondent group. Thus, the questionnaire utilized with the volunteer lay leaders was an adaptation of section three, shortened by the deletion of the column dealing with relative difficulty (Appendix B).

Population and Sample Determination

Population of the study

Five respondent groups were identified for inclusion in this study. The five groups include:

1. Extension 4-H and Youth Leaders. The administration of the Iowa CES has established professional staff positions responsible

for the planning, supervising the execution and evaluation of the 4-H and Youth programs at the county level. At the time of this study, 53 positions were budgeted throughout Iowa. Six of these positions were vacant at the time of the study.

2. Area and State Administration. This group is the combination of two groups of administrators directly involved with the 4-H Club program in Iowa. The first group is the Area Extension Directors (AED). This group has direct personnel supervision of the Extension 4-H and Youth Leaders and overall program supervision of the counties in their area. The director of the Iowa CES has appointed the twelve AEDs. All twelve of these positions were included in this study. The second group are the members of the State 4-H Staff with the title of State 4-H Leader and Assistant State 4-H Leader. This group is responsible for overall statewide direction and guidance of the 4-H and Youth program. Nine individuals have been appointed to these positions.

3. County Agricultural Extension Council. Each county in Iowa has a legally constituted body composed of one adult elected from each township. This group is responsible for governing the County Extension Service in their respective counties. Iowa has one hundred Extension Councils as provided by Senate File 198 of the 1955 General Assembly of Iowa.

4. 4-H Expansion and Review Committee (County 4-H Committee). The implementation of the rules and regulations to implement the provisions of Title VI--Non Discrimination in Federally Assisted

Programs of the Civil Rights Act of 1964 requires that each county organize and maintain a broad-based committee known as the 4-H Expansion and Review Committee. This committee, varying in number of members, appointed by the County Agricultural Extension Council, is responsible for overall direction and policy determination as it relates to the 4-H and Youth programs of the CES. The membership is to include youth representatives, minority constituents of the county, and adults with a past history of 4-H program involvement. The exact number of 4-H Expansion and Review Committee members in the state of Iowa varies yearly as counties adjust committee size to more nearly represent the youth of the county to be served.

5. 4-H Club Organizational Leaders. The basic unit for conducting the ongoing 4-H and Youth programs is the local 4-H club, normally organized in a small geographic area of a county. In rural counties this geographic area is often a township. In urban areas, the geographic area may be a specific section of a given community. The adult leadership of each of these clubs is provided by volunteers interested in working with young people. Each club, regardless of the number of members, is encouraged to have at least one adult with responsibility for the overall functioning and organization of the local club. In 1977, records show 3,097 4-H clubs, each with at least one 4-H club organizational leader.

Selection of sample

The selection of the participants of each respondent group was achieved as follows:

1. Extension 4-H and Youth Leaders. CES staff in the field with this title, with the exception of the four Extension 4-H and Youth Leaders involved in the development of the original questionnaire, were asked to complete the AIR-provided questionnaire.

2. Area and State Administration. Each of the twelve AEDs and nine of the State 4-H staff was asked to complete the first three sections of the AIR questionnaire.

3. For the three volunteer groups (County Agricultural Extension Council, 4-H Expansion and Review Committee and 4-H Club Organizational Leaders), a random selection process was developed. A goal of one hundred completed questionnaires for each respondent group was established, based on the expectation of a sixty percent return. It was suggested that one hundred sixty randomly selected individuals be identified in each type of volunteer lay group. The following steps were completed to achieve random selection.

a. Sixty-five counties were identified as being served by professional Extension 4-H and Youth Leaders on a one- or two-county basis. These counties were listed alphabetically and numbered. (The remaining 35 counties of the state are served by Area 4-H and Youth Leaders.)

b. With computer assistance, a list of twenty random numbers was generated. These numbers identified the counties which were to be included in the study. The counties selected are shown on the map in Figure 3. This resulted in the identification of nine counties which have a two-county

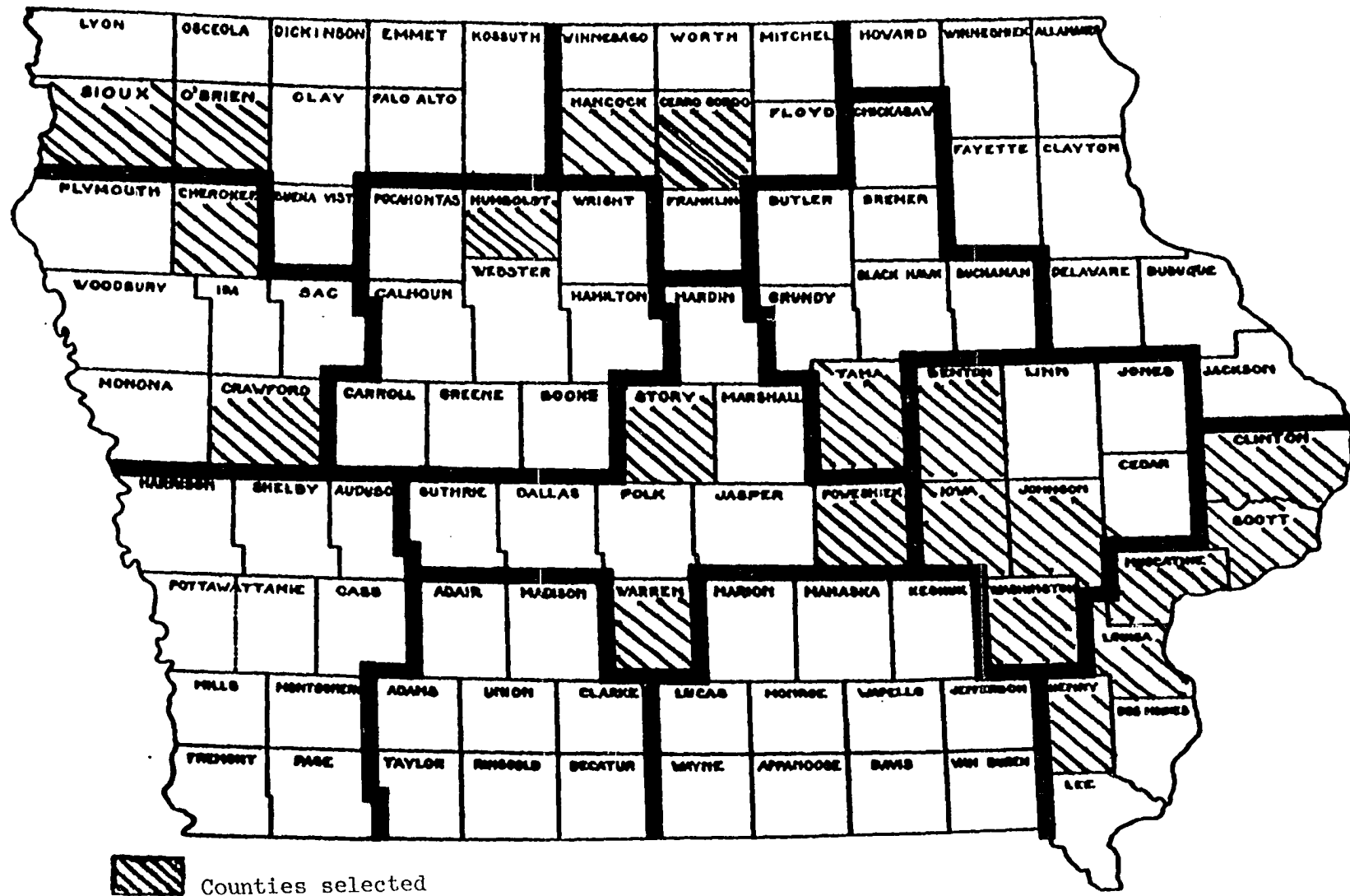


Figure 3. The twenty counties selected for the study

professional Extension 4-H and Youth Leader, seven counties which employ a full-time Extension 4-H and Youth Leader and four counties with a part-time Extension 4-H and Youth Leader. The counties were located in eight of the twelve Extension Areas with more of the counties located in the eastern portion of the state. This area has a higher level of population and a larger number of Extension 4-H and Youth Leaders.

c. The professional staff in the randomly selected counties was contacted and asked to provide a list of names and addresses of all of the members of the three respondent lay volunteer groups. Upon receipt of this list, each group was numbered consecutively, starting with number one.

d. With computer assistance, random numbers were generated to select eight members of each of the three respondent groups in the twenty selected counties.

e. This procedure resulted in the identification of one hundred sixty County Agricultural Extension Council members, one hundred fifty-nine members of the County 4-H Expansion and Review Committee and one hundred fifty-four 4-H Club Organizational Leaders to receive the questionnaire. In seven cases, individuals held two volunteer positions. When this occurred, they were provided only one questionnaire.

Collection of Data

The questionnaires were distributed to the five respondent groups during June and July, 1977, using the U. S. Postal System. The procedure and results for each group were as follows:

1. Extension 4-H and Youth Leaders. Questionnaires were distributed to the staff the first week of June, 1977. An explanatory letter from this investigator, co-signed by the Director of the Iowa CES and a letter from AIR accompanied the questionnaires (Appendix C). Ninety-five percent of these questionnaires were completed and returned for inclusion in this study.

2. Area and State Administration. Twenty-one AIR-developed questionnaires were distributed to this group on July 8, 1977. An explanatory letter from this investigator accompanied the questionnaire (Appendix D). The instructions asked that they complete only sections one, two and three of the AIR questionnaire. One hundred percent of these questionnaires were completed and returned for inclusion in this study.

3. For the three volunteer lay groups, the investigator-developed questionnaire and an explanatory letter were prepared and printed (Appendix E). Each questionnaire was assigned an individual identification number which was used for record purposes only. This number was removed from all completed questionnaires upon return to this investigator.

- a. A post card briefly explaining the project and alerting the selected volunteer that a questionnaire would be arriving

shortly was mailed the last of June, 1977 (Appendix F).

This was accomplished to alert the volunteers to look for the questionnaire that was mailed in an 8 x 11 brown penalty privilege envelope. (Penalty privilege is extended to professional Extension employees on federal appointment.) Without previous awareness, this investigator was concerned this envelope might be regarded lightly.

b. The questionnaire and explanatory letter were mailed on July 5, 1977, from the Ames downtown U. S. Post Office. It is interesting to note that one respondent indicated that the blank questionnaire was not delivered until July 30, 1977, three weeks after sending. (Many eastern Iowans reported late delivery of the questionnaire.)

c. A reminder card was sent on July 27, 1977, to the volunteers who had not returned the questionnaire by that time (Appendix G).

d. A letter with extra questionnaires was also sent to the County Extension Directors and County Extension 4-H and Youth Leaders, along with the names of those who had not completed the questionnaire as of July 27, 1977. It was the intent of this investigator to have the County Extension Worker in each respective county contact those who had not responded for a last effort to return the questionnaire (Appendix H).

Questionnaires were returned to the investigator in postage-provided envelopes with results shown in Table 1.

Table 1. Questionnaire return analysis

	No. Sent	No. Returned	No. Usable	Percent Returned	Percent Usable
County Agricultural Extension Council Members	160	121	116	75.6	72.5
4-H Expansion and Review Committee Members	159	116	112	72.9	70.4
4-H Club Organiza- tional Leaders	154	110	103	71.4	66.8
Unidentifiable and Unusable (Identifi- cation number removed before returning)		5			
Totals	473	352	331	74.4	69.9

Twenty-one respondents returned incomplete questionnaires. In most cases they indicated that they did not have the time or sufficient knowledge about the 4-H and Youth position to complete the questionnaire. It should be noted that this investigator is aware that the questionnaire was distributed during a very busy period for farm families with harvests of oats and hay crops, as well as fair preparation for most families, rural and urban, who are involved in the 4-H program.

Treatment of Data

The completed questionnaires were coded and the results punched onto eighty-column computer cards. Each of the professional staff questionnaires required six data cards while the lay volunteer groups' questionnaires were punched onto one card. The decks were statistically treated in relation to the various variables. The data were statistically treated with several statistical procedures. The procedures utilized were:

1. A two-point nominal response scale was used to record differences in perception of the respondent groups of the 125 tasks and 14 duty areas performed by the Extension 4-H and Youth Leader. Chi Square statistical procedures were used to determine statistical significant differences. (Nie, et al., 1975, p. 223) This procedure was used to test null hypotheses one and four.

2. A nine-point (one to nine) response scale was used to record differences in perception of the respondent groups for the remainder of both questionnaires.

- a. To determine if there were differences in perception between the Extension 4-H and Youth Leader and the Area and State Administrators as to the amount of time spent performing the tasks, relative criticality and relative difficulty of the tasks and duties, the students t-test was used. (Nie, et al., 1975, p. 269) This procedure was used to test the data related to null hypotheses two, three and seven.

b. To determine if there were differences in perceptions among the five respondent groups as to the relative amount of time spent performing each duty, and the relative criticality of each duty, a one-way classification analysis of variance procedures was used. (Nie, et al., 1975, p. 422) The one-way classification analysis of variance procedures was supplemented on those items where significant differences were determined. Duncan's Multiple Range Test was utilized to determine which specific group or groups differed. (Nie, et al., 1975, p. 427) These procedures were used to test the data related to null hypotheses five and six. This will be referred to as Duncan's test throughout the remainder of this paper.

3. In addition to the above statistical treatments, appropriate descriptive statistical data such as mean, standard deviation and relative percentages were used to further describe the results of this study.

FINDINGS

The fourth chapter contains the findings of this study, comparing perceptions of the respondent groups to the role of the professional Extension 4-H and Youth Leader as performed for the Iowa CES. These respondent groups were classified as Extension 4-H Youth Leaders, Area and State Administrators, members of County Agricultural Extension Councils, members of 4-H Expansion and Review Committees and 4-H Club Organizational Leaders. These findings will be explained primarily through the use of tables with accompanying discussion.

As outlined in Chapter one, this investigation was designed to seek answers to the following questions:

1. What are the specific tasks associated with the broad duties performed by Extension 4-H and Youth Leaders?
2. What is the relative amount of time spent by Extension 4-H and Youth Leaders performing each task?
3. How critical are the tasks performed by Extension 4-H and Youth Leaders?
4. What are the broad duties performed by Extension 4-H and Youth Leaders?
5. What is the relative amount of time spent performing each duty performed?
6. How critical are duties performed by Extension 4-H and Youth Leaders?
7. How difficult are the duties performed by Extension 4-H and Youth Leaders?
8. Do the following factors alter the respondents' perceptions of the role of Extension 4-H and Youth Leaders?
 - a. Position of respondents
 - b. Number of years in present position

- c. Sex classification
- d. Educational level completed by respondents
- e. Type of geographical assignment of the professional
Extension 4-H and Youth Leaders
- f. Prior experience as a 4-H member

The first part of this chapter will review descriptive statistics reported by the respondent groups and will summarize these findings. The second part of the chapter will review the statistical analysis developed for the hypothesis dealing with the task analysis. The third section will review the statistical analysis developed for the hypothesis dealing with the duty areas.

Description of Respondents

Number of years in present position

The respondents were asked to indicate the length of time they had held the position considered in this study. Three categories of responses were available. The results which were obtained are reported in Table 2.

The Chi Square statistical procedure test of independence showed a statistically significant difference in the distribution of the three volunteer groups from what was expected. The largest variation between the actual distribution and the expected distribution for the volunteer respondents occurred with the 4-H Club Organizational Leaders with four or more years of service. There are twenty-six more respondents included in this category than were expected.

Table 2. Number of years in present position

Position	Number of Respondents with Service of:			Total
	Less than one year	One to three years	Four or more years	
<u>Volunteer Leaders</u>				
County Agricultural Extension Council Members	32	71	13	116
4-H Expansion and Review Committee Members	41	48	23	112
4-H Club Organiza- tional Leaders	13	35	55	103
<u>Professional Staff</u>				
Extension 4-H and Youth Leaders	7	14	20	41
Area and State Administrators	<u>3</u>	<u>2</u>	<u>16</u>	<u>21</u>
TOTAL	96	170	127	393
	24.4%	43.3%	32.3%	100%
Significance = <.001 - 3 volunteer leader groups				

The next group with the biggest variation was the members of the County Agricultural Extension Councils with four or more years of service. This group was composed of 18 fewer respondents than was expected from the normal distribution.

It must be recognized that the Extension Council members are elected for a two-year term and can serve for a total of four years if reelected for a second two-year term. 4-H Expansion and Review Committee members are generally on a rotating term basis of three to five years, depending on the particular county policy. There is no restriction on number of years an individual can serve as a 4-H Club Leader or be employed as a professional with the Iowa CES, excluding mandatory retirement.

Sex classification

The respondents were asked to report their sex classification. The results obtained are shown in Table 3.

The Chi Square statistical procedure test of independence showed a statistically significant difference in the distribution of the three volunteer groups from what was expected.

Two areas contributed to the significant difference. The largest variation between the actual distribution and the expected distribution for the volunteer respondents occurred with the County Agricultural Extension Council members. Nineteen more males were among the respondents than were expected. However, Extension Councils have always seen

Table 3. Sex classification

Position	Male	Female	Total
<u>Volunteer Leaders</u>			
County Agricultural Extension Council Members	78	38	116
4-H Expansion and Review Committee Members	52	60	112
4-H Club Organiza- tional Leaders	37	66	103
<u>Professional Staff</u>			
Extension 4-H and Youth Leaders	24	17	41
Area and State Administrators	<u>18</u>	<u>3</u>	<u>21</u>
TOTALS	209	184	393
	53.2%	46.8%	100%

Significance = <.001 - 3 volun-
teer
leader
groups

far greater numbers of men than women elected to these positions because of the strong agricultural education program emphasis.

The next group with a large variation was the 4-H Club Organizational Leaders which had fourteen more female respondents than were expected. There is a larger number of girls' 4-H clubs than boys' 4-H clubs in the state of Iowa. This was reflected in the random sample drawn since a higher number of females were selected as 4-H Club Organizational Leaders for this study. It should also be pointed out that the Extension 4-H and Youth Leader position, while gradually changing, has previously been male dominated.

Educational level completed by respondents

The respondents were asked to report the level of education they had completed. Five categories of responses were available. The results obtained are listed in Table 4.

The Chi Square statistical procedure test of independence showed that there was no statistically significant difference noted in the actual distribution from the expected distribution for the three volunteer leader groups.

The analysis of Table 4 indicates that the educational level of the respondent groups is high. For all the respondents, 58.2 percent have some training beyond high school. For the volunteer groups, 50.1 percent of the respondents have formal education beyond high school.

The 4-H Expansion and Review Committee shows three percent of the respondents as completing eleventh grade or less. The membership of the 4-H Expansion and Review Committee does include representatives of

Table 4. Educational level completed by respondents

Position	Number of Respondents:				Total
	Group 1 ^a	Group 2 ^a	Group 3 ^a	Group 4 ^a	
<hr/>					
<u>Volunteer Leaders</u>					
County Agricultural Extension Council Members	2	53	38	23	116
4-H Expansion and Review Committee Members	10	47	27	28	112
4-H Club Organiza- tional Leaders	5	47	28	23	103
 <u>Professional Staff</u>					
Extension 4-H and Youth Leaders	0	0	0	41	41
Area and State Administrators	<u>0</u>	<u>0</u>	<u>0</u>	<u>21</u>	<u>21</u>
TOTALS	17	147	93	136	393
	4.3%	37.4%	23.7%	34.6%	100%

Significance = .220 - 3 volunteer leader groups

^aGroup 1 = Respondents who completed 11th grade or less; Group 2 = Respondents who are high school graduates; Group 3 = Respondents who have a trade, business or technical school diploma or one to three years of college; Group 4 = Respondents who have 4-year college degrees and/or graduate degrees.

youth served by the 4-H program. Therefore, the three percent could include 4-H members presently serving on this committee and currently attending high school.

Type of geographical assignment of the professional Extension 4-H and Youth Leaders

The respondents were asked to report the type of assignment held by the Extension 4-H and Youth Leaders in their respective counties. Four choices were available. The results are shown in Table 5.

The Chi Square statistical procedure test of independence did not show a statistically significant difference from the expected distribution for the volunteer leader respondent group.

When comparing the percentages of respondents from the 20 counties in this study categorized by the type of assignment of the professional Extension 4-H and Youth Leader with the actual distribution of the professional Extension 4-H and Youth Leaders in those counties by nature of assignment, it was noted that the two percentages were nearly identical.

Prior experience as a 4-H member

The respondents were asked to indicate if they had been a 4-H club member when they were of 4-H club age. A yes-no response choice was available. The results obtained are shown in Table 6.

Utilizing the Chi Square statistical procedure test of independence, there was no statistically significant difference noted in the actual distribution from the expected distribution. 68% of the volunteer leader respondents reported experience as a 4-H club member.

Table 5. Type of geographical assignment of the professional Extension 4-H and Youth Leaders

Position	Less than Full-time One County	Full- Time One County	Full- Time Two County	Total
<u>Volunteer Leaders</u>				
County Agricultural Extension Council Members	30	37	49	116
4-H Expansion and Review Committee Members	23	38	51	112
4-H Club Organiza- tional Leaders	<u>26</u>	<u>37</u>	<u>40</u>	<u>103</u>
TOTAL	79	112	140	331
	23.9%	33.8%	42.3%	100%
Significance = .803 - 3 volunteer leader respondent groups				
Number and percent of counties in the study	4	7	9	20
	20%	35%	45%	100%

Table 6. Prior experience as a 4-H member

Positions	Yes	No	Total
<u>Volunteer Leaders</u>			
County Agricultural Extension Council Members	79	37	116
4-H Expansion and Review Committee Members	80	32	112
4-H Club Organiza- tional Leaders	67	36	103
<u>Professional Staff</u>			
Extension 4-H and Youth Leaders	32	9	41
Area and State Administrators	<u>14</u>	<u>7</u>	<u>21</u>
TOTAL	272	121	393
	69.2%	30.8%	100%
Significance = .604 - 5 re- spondent groups			
.603 - 3 vol- unteer leader groups			

Section One Summary

Utilizing the descriptive statistics available, the following descriptions of the respondent groups are suggested:

1. County Agricultural Extension Council members. The majority of members of this group who responded to the questionnaire could be described with the following characteristics:

- a. One to three years of service on the Extension Council .
61 percent of the study respondents had served this period of time.
- b. Completed some formal training above the high school level.
52 percent of the respondents had schooling above high school completion.
- c. Male
67 percent of the respondents were male.
- d. Prior 4-H member experience
68% of the council members responding to the questionnaire had been 4-H members.

2. 4-H Expansion and Review Committee members. The majority of the members of this group who responded to the questionnaire could be described with the following characteristics:

- a. One to three years on the 4-H and Expansion Review Committee
with a greater tendency to serve fewer years than do the Extension Council members.

42 percent of the respondents served one to three years while 36 percent of the members served one year or less.

- b. Completed at least a high school education with the tendency to complete additional training beyond high school.

49 percent of the respondents had education above the high school level.

- c. Female

53 percent of the respondents on the 4-H and Expansion Review Committee were female.

- d. Prior 4-H member experience

71 percent of the 4-H and Expansion Review Committee members responding to the questionnaire had been 4-H members.

3. 4-H Club Organizational Leaders

- a. Four or more years of being a 4-H leader

53 percent of the respondents reported that they have served four or more years. An additional 34 percent of the respondents have served one to three years.

- b. Completed some formal training above the high school level

45 percent reported a high school education while an additional 49.5 percent reported training beyond high school.

- c. Female

64 percent of the respondents in this group were female.

d. Prior 4-H member experience

65 percent had experience as a 4-H member.

The descriptive data of the professional staff revealed the following characteristics:

1. Extension 4-H and Youth Leader

a. Four or more years of service to the position occupied.

48.8 percent reported service of four or more years with an additional 34.1% having one to three years of service.

b. Completed a bachelor's degree program

100 percent of the respondents have at least a bachelor's degree and 32 percent have a master's degree.

c. Male

58 percent of the professional staff at the time of this study are male.

d. Prior 4-H member experience

78 percent reported experience as a 4-H member during their youth.

2. Area and State Administrators

a. Four or more years of service to the position occupied.

76 percent of the administrators have held this position for this length of service.

b. Completed a graduate degree program

All of the Area and State Administrators have at least a master's degree as a minimum requirement for this position. Two respondents hold Ph.D. degrees.

c. Male

85 percent of the Area and State Administrators at the time of this study were male.

d. Prior 4-H member experience

66.7 percent indicated former 4-H membership.

Tests of Hypotheses - Task Analysis

The first section of the professional staff questionnaire related to an analysis of 125 tasks and was divided into fourteen duty areas which might be performed by Extension 4-H and Youth Leaders. This investigator has grouped the fourteen duty areas into three general categories to aid in the summarization discussion of the hypotheses.

The three categories and respective duty areas are:

1. Program Related

Duty 1 Assess Community Needs

Duty 2 Prepare Annual Plan of Work

Duty 8 Evaluate Program Effectiveness

Duty 9 Report Activities, Impact, and Accomplishments

Duty 10 Develop and Maintain Public Relations

Duty 11 Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture

Duty 14 Supervise Staff

2. Program Execution

Duty 3 Prepare Specific Program Plans

Duty 4 Conduct Programs

Duty 5 Respond to Client Requests for Specific Information

Duty 6 Respond to Client Requests for Technical Assistance

Duty 7 Recruit, Train, and Utilize Lay Leaders

3. Administrative

Duty 12 Maintain and Increase Personal Professional Competencies

Duty 13 Perform Administrative Functions

Three hypotheses are related to the analysis of the 125 tasks.

The general form of the null hypothesis will be rejected if ten or more of the tasks are found to be significantly different utilizing the .05 level of significance.

Hypothesis one - Is task performed?

The first hypothesis states: There is no significant difference between the Extension 4-H Leaders' and their Area and State Administrators' perceptions of the tasks within each duty performed by the Extension 4-H and Youth Leader.

Using the Chi Square procedures, the 125 task statements were analyzed for differences between Extension 4-H and Youth Leaders and Area and State Administrators. The null hypothesis was rejected when the position of the respondents was the independent variable. The null hypothesis was rejected for 13 of the 125 task statements where significant differences were noted. These 13 tasks can be divided into two groups.

The first group is composed of six tasks. Over 51 percent of the Extension 4-H and Youth Leaders indicated they performed these tasks. The null hypothesis for these six tasks was rejected as in each task a significantly larger number of Area and State Adminis-

trators indicated that the task should be included as part of the job. The six tasks are identified in Table 7.

The second group is composed of seven tasks which fewer than 51 percent of the Extension 4-H and Youth Leaders indicated that they performed. A significantly greater number of Area and State Administrators perceived the tasks as being performed. Thus, the null hypothesis was rejected for these seven tasks. The seven tasks are identified in Table 8.

The differences in perception of the 13 tasks which are shown in Tables 7 and 8 were concentrated into five of the fourteen duty areas. There were no significant differences noted for the tasks in the other nine duty areas. It should be further noted that 11 of the 13 tasks are clustered in three of the duty areas. These areas are: Respond to Client Requests for Technical Assistance; Evaluate Program Effectiveness; Perform Administrative Functions.

Duty Area, Respond to Client Requests for Technical Assistance, is composed of nine tasks of which three showed significant differences. The nine tasks in this duty area were performed by generally fewer Extension 4-H and Youth Leaders than any of the tasks of the other 13 duty areas.

Duty Area, Evaluate Program Effectiveness, had three of its six tasks performed by significantly fewer Extension 4-H and Youth Leaders than perceived by the Area and State Administrators. This occurred even though more than 51 percent of the Extension 4-H and Youth Leaders indicated they performed the tasks.

Table 7. Tasks performed by 51 percent or more of Extension 4-H and Youth Leaders where statistically significant differences between professional staff groups were noted

Duty Area	Task	Group 1 ^a		Group 2 ^b		Probability Level
		No.	Percent	No.	Percent	
Assess Community Needs	Educate community on needs and priorities	24	58.5	20	95.2	.01
Evaluate Program Effectiveness	Obtain quantity and quality measures	28	68.3	21	100	.02
	Assess interest of other groups of repeat of program or follow-on	25	61.0	19	90.5	.04
	Assess subsequent behavior changes	29	70.7	21	100	.02
Maintain and Increase Personal Professional Competencies	Take formal education courses	28	68.3	21	100	.02
Perform Administrative Functions	Represent program areas in administrative decisions	26	63.4	19	90.5	.05

^aGroup 1 = Extension and 4-H and Youth Leaders who indicated task was performed.

^bGroup 2 = Area and State Administrators who indicated expectation that task should be performed.

Table 8. Tasks performed by fewer than 51 percent of Extension 4-H and Youth Leaders where statistically significant differences between professional staff groups were noted

Duty Area	Task	Group 1 ^a		Group 2 ^b		Probabil- ity Level
		No.	Percent	No.	Percent	
Respond to Client Requests for Tech- nical Assistance	Evaluate implica- tions of possi- ble alternative with respect to client's situation	19	46.3	16	76.2	.05
	Demonstrate proce- dures if necessary	14	34.1	14	66.7	.04
	Follow up results and evaluate impact of assistance given	18	43.9	16	76.2	.04
Perform Adminis- trative Functions	See that office equip- ment is maintained	5	12.2	10	47.6	.01
	Ensure that County Extension Office is in compliance with EEO requirements	9	22.0	12	57.1	.02
	Provide information for budget prepa- ration	11	26.8	18	85.7	<.001
	Serve on office committees	13	31.7	17	81.0	.001

^aGroup 1 = Extension and 4-H Youth Leaders who indicated task was performed.

^bGroup 2 = Area and State Administrators who indicated expectation that task should be performed.

Duty Area, Perform Administrative Functions, had five of the 13 tasks showing significant differences.

As reported earlier, each of these tasks with significant differences was perceived performed by a significantly larger number of Area and State Administrators than by the Extension 4-H and Youth Leaders.

Another area of interest to this investigator is the tasks which most of the Extension 4-H and Youth Leaders indicated they performed and to which the Area and State Administrators indicated general agreement.

In Table 9, 53 tasks are identified which both professional groups perceived as being performed by at least 90 percent of the Extension 4-H and Youth Leaders. There were no significant differences noted in these 53 tasks.

Table 9. 53 tasks which both professional groups perceive as being performed by 90 percent or more of the Extension 4-H and Youth Leaders

Duty Area	Task
Assess Community Needs	Review past program interest and results, including requests for assistance
Prepare Annual Plan of Work	Review prior narrative and statistical reports
	Review, up-date, or prepare long-range plan
	Select program topics
	Select teaching methods
	Consult advisory committee and other community leaders in preparation and review of plan of action

Table 9, continued

Duty Area	Task
Prepare Specific Program Plans	Coordinate plans with other local staff and supporting staff
	Schedule programs on calendar
	Code plan according to EMIS codes
	Determine objectives and audience for program
	Review available materials and secure additional materials if needed
	Identify resource personnel and assign responsibilities
	Determine most effective learning strategies and experiences for subject and specific audiences
	Set schedule
	Plan for personnel, facilities, equipment and publicity
	Ensure that programs will be in compliance with relevant policies and regulations
Conduct Programs	Plan program evaluation
	Communicate and coordinate plans with other staff
	Prepare and issue announcements
	Obtain speakers, materials, equipment, handouts
	Conduct educational programs
Respond to Client Requests for Specific Information	Lead discussions
	Evaluate programs
Respond to Client Requests for Specific Information	Question client to determine full nature of the problem
	Refer client to source of information

Table 9, continued

Duty Area	Task
Recruit, Train, and Utilize Lay Leaders	Determine type and number of lay leaders needed
	Consult advisory committee members or other key people in the community for nominations and assistance in recruiting leaders
	Discuss with potential leaders what is expected of them and how they can contribute
	Identify or assist leaders in identifying training needs
	Plan and conduct training sessions
	Assign program responsibilities to lay leaders
	Provide continuing support, training, and guidance to lay leaders
	Provide appropriate recognition for lay leaders
Report Activities, Impact, and Accomplishments	Assemble data to be included in report
	Report statistical data on EMIS according to codes
Develop and Maintain Public Relations	Identify individuals and groups whose support is important to the Cooperative Extension Service
	Develop and maintain working relationships and rapport with key individuals
	Develop and maintain working relationships and rapport with mass media
	Prepare publicity articles

Table 9, continued

Duty Area	Task
Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture	Provide information requested Respond to requests from other counties Share information with other agents and with university personnel Coordinate programs through appropriate channels with other jurisdictions Keep administration informed of results, problems, and progress Learn roles of ES, University, and Department of Agriculture and use their services Cooperate with other county, State and Federal agencies and organizations
Maintain and Increase Personal Professional Competencies	Evaluate personal areas of strengths and weaknesses Read relevant periodicals, publications Participate in training conferences, workshops Participate in professional organizations and meetings Learn how to use equipment needed for programs
Perform Administrative Functions	Participate in staff meetings Ensure that program operations are in compliance with affirmative action requirements

A summary of the number of tasks from each area that are perceived as being performed at the 90 percent or above level by both professional groups is presented in Table 10. The majority of the tasks shown in Table 10 are concentrated in seven duty areas. Three of these seven duty areas are included in the category of program execution, three in the category of program related, and one duty area in the administrative category.

Table 10. Number of tasks perceived performed at the 90 percent or above level by both professional groups summarized by duty areas

Duty Area	Number of tasks at 90% or above	Number of tasks in duty area
Assess Community Needs	1	9
Prepare Annual Plan of Work	8	12
Prepare Specific Program Plans	9	13
Conduct Programs	5	10
Respond to Client Requests for Specific Information	2	6
Respond to Client Requests for Technical Assistance	0	9
Recruit, Train, and Utilize Lay Leaders	8	12
Evaluate Program Effectiveness	0	6
Report Activities, Impact, and Accomplishments	2	5
Develop and Maintain Public Relations	4	8

Table 10, continued

Duty Area	Number of tasks at 90% or above	Number of tasks in duty area
Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture	7	8
Maintain and Increase Personal Professional Competencies	5	7
Perform Administrative Functions	2	13
Supervise Staff	<u>0</u>	<u>7</u>
Totals	53	125

In Appendix I, the results of the task analysis questionnaire are reported.

Hypothesis two - Relative time spent on task if performed

The professional staff was asked to evaluate the relative amount of time spent performing each of the tasks they checked as being performed. These responses were used to test hypothesis two which states: There is no significant difference between the professional Extension 4-H and Youth Leaders' and their Area and State Administrators' perceptions of the relative amount of time spent by the Extension 4-H and Youth Leader performing tasks within each duty.

Relative amount of time spent as defined by AIR is the total amount of time spent doing the task compared with the amount of time

spent on all other tasks performed. A nine-point scale, ranging from one as extremely low to nine as extremely high, was used.

The students t test was used to analyze the responses of the two respondent groups.

The null hypothesis was rejected when the position of the respondents was the independent variable. Applied to the individual task statements, the null hypothesis was rejected for 28 of the 125 task statements.

Three areas of interest are noted in this section which are related to relative amount of time spent.

The first area of interest is the 28 tasks where significant differences were noted. For the twenty-eight tasks identified in Table 11, it is indicated that the Area and State Administrators evaluated each task as consuming significantly less time than did Extension 4-H and Youth Leaders. The tasks are listed by duty areas with the mean scores of the two professional groups and level of statistical significance reported.

The greatest number of differences in perception of time spent performing the tasks between the Extension 4-H and Youth Leaders and the Area and State Administrators was concentrated in four duty areas. As indicated in Table 12, 17 of the 28 significantly different tasks were noted in the following four areas: Respond to Client Requests for Technical Assistance; Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal

Table 11. Tasks with statistical significant differences when comparing relative amount of time spent

Duty Area	Task	Group 1 ^a Mean Score	Group 2 ^b Mean Score	Probabil- ity Level ^c
Prepare Annual Plan of Work	Review, up-date or pre- pare long range plan	4.921	3.684	.03 P
	Schedule programs on calendar	4.350	3.142	.02 S
	Code plan according to EMIS codes	3.567	1.950	<.001 S
Prepare Specific Program Plans	Consult advisory committee and other community leaders in the preparation of specific program plans	5.810	4.411	.01 S
	Plan material to be covered	6.216	4.611	.01 P
	Estimate dollar and time costs to implement spe- cific programs	4.228	2.411	.001 S

^aGroup 1 = Extension 4-H and Youth Leaders.

^bGroup 2 = Area and State Administrators.

^cS = Separate t variance; P = Pooled t variance, utilizing the .05 level of significance.

Table 11, continued

Duty Area	Task	Group 1 ^a Mean Score	Group 2 ^b Mean Score	Probabil- ity Level ^c
Respond to Client Requests for Technical Assistance	Consult source material, specialist if necessary	4.310	3.166	.03 P
	Demonstrate procedures if necessary	4.142	2.714	.01 P
	Keep records of requests and assistance given	3.307	1.714	.04 P
	Follow up results and evaluate impact of assistance given	4.444	2.062	<.001 P
Report Activities, Impact, and Accomplishments	Assemble data to be in- cluded in report	5.210	3.842	.03 P
	Report statistical data on EMIS according to codes	4.500	2.714	.001 P
Develop and Maintain Public Relations	Develop, maintain, and up- date lists for dis- semination of informa- tion	4.103	2.578	.01 P
	Make visits to promote CES programs	4.375	3.000	.03 P

Table 11, continued

Duty Area	Task	Group 1 ^a Mean Score	Group 2 ^b Mean Score	Probabil- ity Level ^c
Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture	Provide information requested	5.025	3.650	.02 P
	Respond to requests from other counties	4.615	3.157	.03 P
	Share information with other agents and with university personnel	5.025	3.809	.05 P
	Cooperate with other county, State and Federal agencies and organizations	3.871	2.900	.03 S
Maintain and Increase Personal Professional Competencies	Evaluate personal areas of strengths and weaknesses	4.923	3.476	.01 P
	Develop long-range plan for professional growth	4.542	2.904	.01 P
	Participate in professional organizations and meetings	4.815	3.619	.02 P
	Take formal education courses	4.750	3.000	.01 P

Table 11, continued

Duty Area	Task	Group 1 ^a Mean Score	Group 2 ^b Mean Score	Probabil- ity Level ^c
Perform Adminis- trative Functions	Complete administrative reports and vouchers	5.187	2.187	<.001 S
	Participate in staff meetings	5.575	4.190	.02 P
	Set up/maintain filing system	4.318	2.692	.04 P
	Order supplies	3.960	1.909	.001 S
	Provide information for budget preparation	3.727	2.222	.04 P
Supervise Staff	Make assignments and explain duties	5.871	4.375	.02 P

Table 12. Summary of tasks with significant differences in relation to relative time spent listed by duty areas

Duty Area	No. of tasks with significant difference	Total number of tasks in duty	Percent of tasks with significant difference
Prepare Annual Plan of Work	3	12	25
Prepare Specific Program Plans	3	13	23
Respond to Client Requests for Technical Assistance	4	9	44
Report Activities, Impact, and Accomplishments	2	5	40
Develop and Maintain Public Relations	2	8	25
Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Ag- riculture	4	8	50
Maintain and Increase Personal Professional Competencies	4	7	57
Perform Administrative Functions	5	13	38
Supervise Staff	1	7	14
TOTAL	<u>28</u>		

Departments of Agriculture; Maintain and Increase Personal Professional Competencies; Perform Administrative Functions. As reported earlier, for each of the 28 tasks the Area and State Administrators perceived the tasks as consuming significantly less time than the Extension 4-H and Youth Leaders.

The second area of interest included the tasks that were evaluated as consuming above average or greater amount of time based on the nine-point rating scale. Utilizing the mean score of 5.5 or above, twenty tasks were identified. These tasks are reported in Table 13 in rank order by mean score of the Extension 4-H and Youth Leaders. The mean score and rank order of the tasks as evaluated by the Area and State Adminstrators are reported at the right of the table for comparison purposes.

An analysis of Table 13 indicates that the most time consuming tasks are recognized by both professional groups. The rank order of the first six tasks is nearly identical with the exception of the task ranked fourth by the Extension 4-H and Youth Leaders. For this task, Plan material to be covered, a significant difference is noted.

There is some similarity to the rank ordered mean scores after the first six tasks with the Area and State Administrators perceiving the tasks as generally consuming less time than do the Extension 4-H and Youth Leaders.

For only the first three tasks listed in Table 13 did the Area and State Administrators perceive the task as consuming more time

Table 13. Tasks with mean scores above average as perceived by the two professional groups in relation to time spent

Rank by Group 1 ^a	Task	Duty	Group 1 ^a Mean Scores	Group 2 ^b Mean Scores	Probabil- ity Level ^c	Rank by Group 2 ^b
1	Provide continuing support, training, and guidance to lay leaders	Recruit, Train, and Utilize Lay Leaders	7.075	7.700		1
2	Plan and conduct training sessions	Same as above	7.050	7.600		2
3	Conduct educational programs	Conduct Programs	6.675	7.368		3
4	Plan material to be covered	Prepare Specific Program Plans	6.216	4.611	.01 P	27
5	Prepare educational program units including demonstrations, lectures, discussion guides, and evaluation instruments	Same as above	6.184	6.166		4

^aGroup 1 = Extension 4-H and Youth Leaders.

^bGroup 2 = Area and State Administrators.

^cS = Separate t variance; P = Pooled t variance, utilizing the .05 level of significance.

Table 13, continued

Rank by Group 1 ^a	Task	Duty	Group 1 ^a Mean Scores	Group 2 ^b Mean Scores	Probabil- ity Level ^c	Rank by ^b Group 2
6	Plan for personnel, facilities, equipment and publicity	Same as above	6.000	5.600		6
7	Make assignments and explain duties	Supervise Staff	5.871	4.375	.02 P	42
8	Consult advisory committee and other community leaders in the preparation of specific program plans	Prepare Specific Program Plans	5.810	4.411	.01 S	40
9	Lead discussions	Conduct Programs	5.789	5.421		8
10	Select program topics	Prepare Annual Plan of Work	5.775	5.368		9
11	Determine most effective learning strategies and experiences for subject and specific audiences	Prepare Specific Program Plans	5.684	4.750		23
12	Review available material and secure additional materials if needed	Same as above	5.650	4.800		22

Table 13, continued

Rank by Group 1 ^a	Task	Duty	Group 1 ^a Mean Scores	Group 2 ^b Mean Scores	Probabil- ity Level ^c	Rank by Group 2 ^b
13	Assist staff in program development and execution	Supervise Staff	5.617	4.550		32
14	Coordinate work of staff	Same as above	5.607	5.333		11
15	Develop and maintain working relationships and rapport with key individuals	Develop and Main- tain Public Re- lations	5.605	5.238		14
16	Participate in staff meetings	Perform Adminis- trative Functions	5.575	4.190	.02 P	49
17	Participate in train- ing conferences, workshops	Maintain and Increase Personal Professional Competencies	5.536	4.952		20
18	Obtain speakers, materials, equipment handouts	Conduct Programs	5.512	4.684		24

Table 13, continued

Rank by Group 1 ^a	Task	Duty	Group 1 ^a Mean Scores	Group 2 ¹ Mean Scores	Probabil- ity Level ^c	Rank by Group 2 ^b
19	Discuss with potential leaders what is ex- pected of them and how they can contribute	Recruit, Train, and Utilize Lay Leaders	5.473	5.750		5
32	Determine priorities of needs	Assess Community Needs	5.138	5.523		7

than did the Extension 4-H and Youth Leaders. In addition to these three tasks, only nine additional tasks from the total list of tasks were perceived by the Area and State Administrators as consuming more time. For these twelve tasks rated as consuming more time by the Area and State Administrators, seven were included in the duty area of Recruit, Train, and Utilize Lay Leaders.

The tasks evaluated as consuming above average amount of time were likewise concentrated in nine of the 14 duty areas. These are reported in Table 14.

Twelve of the eighteen tasks, or 66 percent rated as consuming above average or greater amount of time as evaluated by the Extension 4-H and Youth Leaders are associated with only three duty areas. These three duty areas fall into the two broader categories of program related and program execution.

The third area of interest is the tasks that were evaluated as consuming low or less amount of performance time. Forty-five tasks were identified with a mean score of 3.5 or below, based on the evaluation of the relative amount of time spent by the two professional groups. These tasks and related duty areas, in rank order of mean score from low to high based on the evaluation by Extension 4-H and Youth Leaders, are identified in Table 15. The mean score and rank order, as evaluated by the Area and State Administrators is reported for comparison purposes.

As reported in Table 15, only nine tasks were identified as consuming a relatively low amount of performance time as perceived by the

Table 14. Summary of tasks consuming above average amount of time, 5.5 or more, listed by duty areas

Duty Area	No. of tasks requiring above average time		Total no. of tasks in duty area
	Group 1 ^a	Group 2 ^b	
Assess Community Needs		1	9
Prepare Annual Plan of Work	1		12
Prepare Specific Program Plans	6	2	13
Conduct Programs	3	1	10
Recruit, Train, and Utilize Lay Leaders	2	3	12
Develop and Maintain Public Relations	1		8
Maintain and Increase Personal Professional Competencies	1		7
Perform Administrative Functions	1		13
Supervise Staff	<u>3</u>	—	7
Totals	18	7	

^aGroup 1 = Extension 4-H and Youth Leaders.

^bGroup 2 = Area and State Administrators.

Table 15. Tasks which rated 3.5 or lower, based on mean score, on relative time spent

Rank by Group 1 ^a	Task	Duty	Group 1 ^a Mean Scores	Group 2 ^b Mean Scores	Probabil- ity Level ^c	Rank by Group 2 ^b
1	Obtain insurance cover- age for groups and clubs if necessary	Conduct Programs	2.970	2.058		5
2	Review demographic data about community	Assess Community Needs	3.000	2.857		24
3	Serve on office committees	Perform Adminis- trative Functions	3.076	2.294		9
4	Keep records of re- quests and informa- tion given	Respond to Client Requests for Specific In- formation	3.133	2.333		10 tie
5	Keep records of requests and assistance given	Respond to Client Requests for Technical Assist- ance	3.307	1.714	.04 P	1
6	Learn how to use equipment needed for programs	Maintain and In- crease Personal Professional Competencies	3.325	2.400		12

^aGroup 1 = Extension 4-H and Youth Leaders.

^bGroup 2 = Area and State Administrators.

^cS = Separate t variance; P = Pooled t variance, utilizing the .05 level of significance.

Table 15, continued

Rank by Group 1 ^a	Task	Duty	Group 1 ^a Mean Scores	Group 2 ^b Mean Scores	Probabil- ity Level ^c	Rank by Group 2 ^b
7	Allocate person-days in each area	Prepare Annual Plan of Work	3.450	2.666		tie 15
8	Facilitate communi- cation between client and specialist	Respond to Client Requests for Technical Assist- ance	3.481	3.473		tie 42
9	Review prior narrative & statistical reports	Prepare Annual Plan of Work	3.487	2.800		20
10	Code plan according to EMIS codes	Same as above	3.567	1.950	<.001 S	4
11	Determine how effective- ness will be evaluated	Same as above	3.583	3.333		39
12	See that office equip- ment is maintained	Perform Administra- tive Functions	3.600	1.900		2
14	Learn roles of ES, University, and Dept. of Agri- culture and use their services	Develop and Main- tain Staff Rela- tionships within the ES, the Uni- versity, and the State and Fed. Depts. of Ag.	3.650	2.809		21

Table 15, continued

Rank by Group 1 ^a	Task	Duty	Group 1 ^a Mean Scores	Group 2 ^b Mean Scores	Probabil- ity Level ^c	Rank by ^b Group 2
15	Participate in staff performance appraisal activities	Perform Administrative Functions	3.678	2.833		22
16	Provide information for budget preparation	Same as above	3.727	2.222	.04 P	8
17	Determine whether significance or frequency of question merits special program or activity	Respond to Client Requests for Specific Information	3.764	2.842		23
18	Assess community resources, facilities, and services	Assess Community Needs	3.812	3.428		40
20	Cooperate with other county, State and Federal agencies and organizations	Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Fed. Depts. of Ag.	3.871	2.900	.03 S	25
24	Order supplies	Perform administrative Functions	3.960	1.909	.001 S	3

Table 15, continued

Rank by ^a Group 1	Task	Duty	Group 1 ^a Mean Scores	Group 2 ^b Mean Scores	Probabil- ity Level ^c	Rank by ^b Group 2
25 tie	Solicit funds from donors for programs as necessary	Conduct Programs	4.000	2.666		15 tie
25 tie	Assess interest of other groups for repeat of program or follow-on	Evaluate Program Effectiveness	4.000	3.157		34 tie
25 tie	Visit location/client if necessary	Respond to Client Requests for Technical Assistance	4.000	3.000		27 tie
30	Participate in recruit- ing, hiring, and training activities	Perform Administra- tive Functions	4.100	3.052		30
31 tie	Develop, maintain, and up-date lists for dissemination of information	Develop and Main- tain Public Relations	4.103	2.578	.01 P	14
34	Demonstrate procedures if necessary	Respond to Client Requests for Technical Assistance	4.142	2.714	.01 P	18 tie

Table 15, continued

Rank by Group 1 ^a	Task	Duty	Group 1 ^a Mean Scores	Group 2 ^b Mean Scores	Probabil- ity Level ^c	Rank by Group 2 ^b
37 tie	Disseminate reports to appropriate persons and groups	Report Activities, Impact, and Accomplishments	4.181	3.190		37
39	Develop, maintain and up-date lists for dissemination of information	Develop and Main- tain Public Re- lations	4.222	3.476		44 tie
40	Estimate dollar and time costs to imple- ment specific programs	Prepare Specific Program Plans	4.228	2.411	.001 S	13
42	Suggest alternatives to client	Respond to Client Requests for Technical Assistance	4.230	3.133		32
43	Prepare and get ap- proval for budget for county program	Perform Adminis- trative Functions	4.250	2.333		10 tie
44	Evaluate usefulness of data for purpose intended	Report Activities, Impact, and Ac- complishments	4.281	3.210		38
45	Consult source material, specialist if neces- sary	Respond to Client Requests for Tech- nical Assistance	4.310	3.166	.03 P	36

Table 15, continued

Rank by Group 1 ^a	Task	Duty	Group 1 ^a Mean Scores	Group 2 ^b Mean Scores	Probabil- ity Level ^c	Rank by Group 2 ^b
46	Question client to determine full nature of the problem	Same as above	4.312	3.444		41
47	Set up/maintain filing system	Perform Adminis- trative Functions	4.318	2.692	.04 P	17
48	Schedule programs on calendar	Prepare Annual Plan of Work	4.350	3.142	.02 S	33
51	Refer client to source of information	Respond to Client Requests for Specific Infor- mation	4.368	3.473		42 tie
52	Make visits to promote CES programs	Develop and Main- tain Public Relations	4.375	3.000	.03 P	27 tie
55	Evaluate implications of possible alterna- tives with respect to client's situation	Respond to Client Requests for Technical Assis- tance	4.421	3.125		31
57	Follow up results and evaluate impact of assistance given	Same as above	4.444	2.062	<.001 P	6

Table 15, continued

Rank by Group 1 ^a	Task	Duty	Group 1 ^a Mean Scores	Group 2 ^b Mean Scores	Probabil- ity Level ^c	Rank by Group 2 ^b
59	Report statistical data on EMIS according to codes	Report Activities, Impact, and Accomplishments	4.500	2.714	.001 P	18 tie
62	Develop long-range plan for professional growth	Maintain and Increase Personal Professional Competencies	4.542	2.904	.01 P	26
66	Respond to requests from other counties	Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture	4.615	3.157	.03 P	34 tie
69	Take formal education courses	Maintain and Increase Personal Professional Competencies	4.750	3.000	.01 P	27 tie
82	Evaluate personal areas of strengths and weaknesses	Same as above	4.923	3.476	.01 P	44 tie

Table 15, continued

Rank by Group 1 ^a	Task	Duty	Group 1 ^a Mean Scores	Group 2 ^b Mean Scores	Probabil- ity Level ^c	Rank by Group 2 ^b
94	Complete administrative reports and vouchers	Perform Adminis- trative Functions	5.187	2.187	<.001 S	7

Extension 4-H and Youth Leaders. This is in contrast to 45 tasks rated at this level by the Area and State Administrators. The Area and State Administrators perceived all 45 tasks as consuming less performance time than did the Extension 4-H and Youth Leaders. As was reported in Table 11, 28 significant differences occurred in the 125 tasks. Nineteen of the 28 tasks were the tasks with the least amount of time spent.

The tasks evaluated as consuming a low amount of time were spread through twelve duty areas. The distribution of tasks by duty area is reported in Table 16.

Appendix I gives the results of the relative amount of time spent for each of the 125 tasks by the two professional staff groups.

Hypothesis three - Relative criticality of task if performed

The professional staff was also asked to evaluate the relative criticality of performing each of the tasks they had checked as performed. Their responses to this section of the questionnaire were used to test hypothesis three which states: There is no significant difference between the professional Extension 4-H and Youth Leaders' and their Area and State Administrators' perceptions of the relative criticality of the tasks performed within each duty by the Extension 4-H and Youth Leader.

Relative criticality was defined by AIR as judgment of the relative importance of performing the task competently in order to do the total job satisfactorily. The same nine-point scale used to evaluate time spent was used to evaluate criticality.

Table 16. Summary of tasks consuming a low amount of time, 3.5 or less, by duty area

Duty Area	No. of tasks requiring a low amount of time		Total no. of tasks in duty area
	Group 1 ^a	Group 2 ^b	
Assess Community Needs	1	2	9
Prepare Annual Plan of Work	2	5	12
Prepare Specific Program Plans		1	13
Conduct Programs	1	2	10
Respond to Client Requests for Specific Information	1	3	6
Respond to Client Requests for Technical Assistance	2	9	9
Evaluate Program Effectiveness		1	6
Report Activities, Impact, and Accomplishments		3	5
Develop and Maintain Public Relations		3	8
Develop and Maintain Staff Re- lationships within the Exten- sion Service, the University, and the State and Federal Departments of Agriculture		3	8
Maintain and Increase Personal Professional Competencies	1	4	7
Perform Administrative Functions	1 —	9 —	13
Totals	9	45	

^aGroup 1 = Extension 4-H and Youth Leaders.

^bGroup 2 = Area and State Administrators.

The students t test was used to analyze the responses of the two professional staff groups. The null hypothesis was rejected when the position of the respondent was the independent variable. When applied to the individual task statements, the null hypothesis was rejected for 16 of the 125 task statements where significant differences were noted.

Three areas of interest will be discussed in this section related to relative criticality. The first area is the 16 tasks which were rejected by the null hypothesis. These tasks and the associated duty areas are identified in Table 17. They are listed by duty areas with the mean score as evaluated by the Extension 4-H and Youth Leaders as well as the mean score of the Area and State Administrators.

The task, Conduct educational programs, was judged to be among the most critical tasks to be performed by both professional groups. While the level of criticality showed a significant difference, this task is rated as one of the most critical tasks to the position.

It should be pointed out that 10 of the 16 tasks in Table 17 identified as being most critical are included in the category of program execution.

The differences in perception of relative criticality occurred in 9 of the 14 duty areas. The distribution is shown in Table 18.

The significant differences were concentrated in four of the duty areas with the greatest number of differences noted in duty areas dealing with Respond to Client Requests for Technical Assistance and Develop and Maintain Public Relations.

Table 17. Tasks with statistical significant differences when comparing relative criticality

Duty Area	Task	Group 1 ^a Mean Scores	Group 2 ^b Mean Scores	Proba- bility Level ^c
Assess Community Needs	Review past program interest and results, including requests for assistance	5.444	4.476	.05 P
Prepare Annual Plan of Work	Coordinate plans with other local staff and supporting staff	6.250	7.150	.04 P
Prepare Specific Program Plans	Plan material to be covered	6.944	5.888	.02 P
Conduct Programs	Solicit funds from donors for programs as necessary	5.225	3.466	.01 P
	Conduct educational programs	7.888	8.631	.03 S
Respond to Client Requests for Specific Information	Question client to determine full nature of the problem	6.222	5.157	.04 P
	Refer client to source of information	6.027	4.947	.04 P

^aGroup 1 = Extension 4-H and Youth Leaders.

^bGroup 2 = Area and State Administrators.

^cS = Separate t variance; P = Pooled t variance, utilizing the .05 level of significance.

Table 17, continued

Duty Area	Task	Group 1 ^a Mean Scores	Group 2 ^b Mean Scores	Proba- bility Level ^c
Respond to Client Requests for Technical Assistance	Visit location/client if necessary	4.769	3.294	.05 S
	Evaluate implications of pos- sible alternatives with respect to client's situation	5.789	4.125	.05 F
	Demonstrate procedures if necessary	4.928	3.357	.04 P
	Follow up results and evalu- ate impact of assistance given	5.222	3.625	.04 P
Recruit, Train, and Utilize Lay Leaders	Evaluate performances of lay leaders in carrying out pro- grams	6.441	5.578	.05 P
Develop and Maintain Public Relations	Prepare publicity articles	7.025	6.142	.04 P
	Develop, maintain, and up-date lists for dissemination of information	6.069	4.684	.03 P
	Make visits to promote CES programs	5.781	4.166	.01 P

Table 17, continued

Duty Area	Task	Group 1 ^a Mean Scores	Group 2 ^b Mean Scores	Proba- bility Level ^c
Develop and Maintain Staff Relationships within the Extension Service, the University and the State and Federal Departments of Agriculture	Share information with other agents and with university personnel	6.307	5.142	.04 P

Table 18. Summary of tasks with significant differences in relation to relative criticality by duty areas

Duty Area	No. of tasks with significant differences	Total no. of tasks in duty area	Percent of tasks with significant differences
Assess Community Needs	1	9	11
Prepare Annual Plan of Work	1	12	8
Prepare Specific Program Plans	1	13	7
Conduct Programs	2	10	20
Respond to Client Requests for Specific Information	2	6	33
Respond to Client Requests for Technical Assistance	4	9	44
Recruit, Train, and Utilize Lay Leaders	1	12	8
Develop and Maintain Public Relations	3	8	37
Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture	1	8	12
Total	16		

A second area of interest is tasks that were evaluated as being above average or greater in terms of relative criticality. Utilizing the mean scores of 5.5 or above, 86 tasks were identified by the Exten-

sion 4-H and Youth Leaders while 66 tasks were identified by the Area and State Administrators as being critical to the position.

Because of the large number of tasks in this area, a higher mean score was used for reporting purposes. Only those tasks with a mean score of 7.0 and above are reported in Table 19. The tasks are shown by rank order by the mean score of the Extension 4-H and Youth Leaders. Again, the mean score of the Area and State Administrators and the rank order of the tasks based on their scores are reported for comparison purposes.

A review of Table 19 points out that the most critical tasks are recognized by both professional groups. There is little similarity in rank order following the first six tasks.

When considering the most critical tasks, those with a mean criticality score of 7.0 or above were found to be clustered within seven duty areas. These are reported in Table 20.

In reviewing Table 20, ten of the 16 tasks by the evaluation of the Extension 4-H and Youth Leaders and seven of the nine tasks, as evaluated by the Area and State Administrators are included in the category of program execution.

The third area of interest is the tasks that were evaluated as being low in terms of criticality to the satisfactory performance of the job.

The Extension 4-H and Youth Leaders evaluated no tasks with a mean score of 3.5 or below in terms of criticality. However, the Area and State Administrators identified seven tasks falling in this range of criticality.

Table 19. Tasks ranked the most critical with a mean score of 7.0 or above by both professional groups

Rank by Group 1 ^a	Task	Duty Area	Group 1 ^a Mean Scores	Group 2 ^b Mean Scores	Proba- bility Level ^c	Rank by Group 2 ^b
1	Plan and conduct training sessions	Recruit, Train, and Utilize Lay Leaders	8.200	8.400		2
2	Provide continuing support, training, and guidance to lay leaders	Same as above	8.150	7.950		3
3	Conduct educational programs	Conduct Programs	7.888	8.631	.03 S	1
4	Discuss with potential leaders what is expected of them and how they can contribute	Recruit, Train, and Utilize Lay Leaders	7.815	7.450		5
5	Prepare educational program units including demonstrations, lectures, discussion guides, and evaluation instruments	Prepare Specific Program Plans	7.324	7.166		7
6	Determine priorities of needs	Assess Community Needs	7.200	7.476		4

^aGroup 1 = Extension 4-H and Youth Leaders.

^bGroup 2 = Area and State Administrators.

^cS = Separate t variance; P = Pooled t variance, utilizing the .05 level of significance.

Table 19, continued

Rank by Group 1 ^a	Task	Duty Area	Group 1 ^a Mean Scores	Group 2 ^b Mean Scores	Proba- bility Level ^c	Rank by Group 2 ^b
7	Make assignments and explain duties	Supervise Staff	7.193	6.687		21
8	Determine objectives and audience for program	Prepare Specific Program Plans	7.189	6.476		28 tie
9	Recruit, select, and organize advisory committee members	Assess Community Needs	7.151	6.473		30
10	Determine most effective learning strategies and experiences for subject and specific audiences	Prepare Specific Program Plans	7.135	7.050		9
11	Obtain commitment from leaders regarding time and resources they will provide	Recruit, Train, and Utilize Lay Leaders	7.058	7.263		6
12	Provide appropriate recognition for lay leaders	Same as above	7.054	6.150		45 tie
13	Identify or assist leaders in identifying training needs	Same as above	7.051	6.950		12
14	Prepare publicity articles	Develop & Maintain Public Relations	7.025	6.142	.04 P	48

Table 19, continued

Rank by Group 1 ^a	Task	Duty Area	Group 1 ^a Mean Scores	Group 2 ^b Mean Scores	Proba- bility Level ^c	Rank by Group 2 ^b
15	Participate in training conferences, workshops	Maintain and In- crease Personal Professional Competencies	7.000	6.904		13
16	Coordinate work of staff	Supervise Staff	7.000	6.666		22
57	Coordinate plans with other local staff and supporting staff	Prepare Annual Plan of Work	6.250	7.150	.04 P	8

Table 20. Summary of tasks with relative criticality of 7.0 or above by duty areas

Duty Area	Number of tasks with high or above in criticality		Number of tasks in duty area
	Group 1 ^a	Group 2 ^b	
Assess Community Needs	2	1	9
Prepare Annual Plan of Work		1	12
Prepare Specific Program Plans	3	2	13
Conduct Programs	1	1	10
Recruit, Train, and Utilize Lay Leaders	6	4	12
Develop and Maintain Public Relations	1		8
Maintain and Increase Personal Professional Competencies	1		7
Supervise Staff	<u>2</u>	<u> </u>	7
Totals	16	9	

^aGroup 1 = Extension 4-H and Youth Leaders.

^bGroup 2 = Area and State Administrators.

In Table 21 the seven tasks are rank ordered from low to high, based on the evaluation of the Extension 4-H and Youth Leaders' mean scores. The mean scores of the seven tasks and rank order as perceived by the Area and State Administrators are shown for comparison purposes.

Table 21. Tasks rated below average in relative criticality rank ordered by mean score of Extension 4-H and Youth Leaders

Rank by Group 1 ^a	Task	Duty Area	Group 1 ^a Mean Score	Group 2 ^b Mean Score	Proba- bility Level ^c	Rank by Group 2 ^b
1	Code plan according to EMIS codes	Prepare Annual Plan of Work	3.527	3.300		5
2	See that office equipment is maintained	Perform Administrative Functions	4.000	3.000		1 tie
5	Keep records of requests and assistance given	Respond to Client Requests for Technical Assistance	4.230	3.000		1 tie
6	Keep records of requests and information given	Respond to Client Requests for Specific Information	4.333	3.111		3
11	Visit location/client if necessary	Respond to Client Requests for Technical Assistance	4.769	3.294	.05 S	4

^aGroup 1 = Extension 4-H and Youth Leaders.

^bGroup 2 = Area and State Administrators.

^cS = Separate t variance; P = Pooled t variance, utilizing the .05 level of significance.

Table 21, continued

Rank by Group 1 ^a	Task	Duty Area	Group 1 ^a Mean Score	Group 2 ^b Mean Score	Proba- bility ^c Level	Rank by Group 2 ^b
14	Demonstrate Pro- cedures if necessary	Respond to Client Requests for Technical Assist- ance	4.928	3.357		6
21	Solicit funds from donors for programs as necessary	Conduct Programs	5.225	3.466	.01 S	7

A review of Table 21 indicates that there is general agreement on the four least critical tasks. There is less agreement as the mean score goes higher as indicated by those items with significant differences.

Considering the least critical tasks, the seven tasks with a below average mean score of 3.5 or lower are associated with six duty areas. Five of the seven least critical tasks are included in the category of program execution.

In Appendix I the mean scores and standard deviations for each of the 125 tasks for relative criticality are reported.

Tests of Hypotheses - Duty Area Analysis

The second section of the professional staff questionnaire and the first section of the volunteer lay leaders questionnaire related to an analysis of 14 duty areas which might be performed by an Extension 4-H and Youth Leader. The grouping of the 14 duty areas into three categories as outlined in section two of this chapter will be used in the discussion.

Four hypotheses are related to the analysis of the 14 duty areas. The general form of the null hypotheses will be rejected if three or more of the duty areas are found to be significantly different when the characteristics of the respondents are considered. The .05 level of significance will be used. The complete results of the questionnaire may be found in Appendix J. Two areas of interest will be discussed for each of the following four hypotheses. The areas of interest are: (1) Duty areas with significant differences, (2) High and low evaluated duty areas.

Hypothesis four - Is duty performed?

Hypothesis four states: There is no significant difference in perceptions of the duties performed by the Extension 4-H and Youth Leaders when classified by the selected characteristics of:

- a. Position of respondents
- b. Number of years in present position
- c. Sex classification
- d. Educational level completed by respondents
- e. Type of geographic assignment of the professional Extension 4-H and Youth Leaders
- f. Prior Experience as a 4-H member

The respondents were asked to report which of the 14 duty areas were performed by the Extension 4-H and Youth Leaders. The respondent characteristics identified in the hypothesis will be discussed separately.

Position of respondents The null hypothesis was rejected when the position of the respondent was the independent variable. When applied to the individual duty areas, the null hypothesis was rejected for 11 of the 14 duty areas. In Table 22 eleven duty areas where significant differences occurred are identified.

For nine of the eleven duty areas with significant differences, the 4-H Expansion and Review Committee had the largest variation in actual distribution from the expected distribution.

The eleven duty areas with significant differences were distributed throughout the three categories of duty areas. Six of the duty areas were in the program related category, three in the program execution category, and the remaining two in the administrative category.

All five respondent groups strongly indicated that each of the 14 duty areas was performed by the Extension 4-H and Youth Leaders. All

Table 22. Duty areas performed with significant differences when classified by position of respondents

Duty Area	Percent of Respondents Who Indicated That the Duties Were Performed					Proba- bility Level
	Group 1 ^a	Group 2 ^a	Group 3 ^a	Group 4 ^a	Group 5 ^a	
Assess Community Needs	87.1	77.7*	77.7	90.2	100	.03
Prepare Annual Plan of Work	95.7	85.7*	90.3	97.6	100	.02
Respond to Client Requests for Specific Information	91.4	83 *	93.2	97.6	100	.02
Respond to Client Requests for Technical Assistance	76.7	58.9*	71.8	75.6	95.2	.01
Recruit, Train, and Utilize Lay Leaders	92.2	87.5*	97.1	100	100	.02
Evaluate Program Effectiveness	84.5	87.5	84.5	100*	100	.03
Report Activities, Impact, and Accomplishments	84.5	75.9*	80.6	100	100	.01

^aGroup 1 = County Agricultural Extension Council members; Group 2 = 4-H Expansion and Review Committee members; Group 3 = 4-H Club Organizational Leaders; Group 4 = Extension 4-H and Youth Leaders; Group 5 = Area and State Administrators.

* Indicates where the actual and expected distribution difference was the largest.

Table 22, continued

Duty Area	Percent of Respondents Who Indicated That the Duties Were Performed					Proba- bility Level
	Group 1 ^a	Group 2 ^a	Group 3 ^a	Group 4 ^a	Group 5 ^a	
Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture	87.1	73.2*	84.5	85.4	100	.01
Maintain and Increase Personal Professional Competencies	83.6	75.9*	80.6	97.6	100	.01
Perform Administrative Functions	87.9	74.1*	75.7	87.8	100	.01
Supervise Staff	75.0	73.2	74.8	90.2*	95.2	.05

duty area had at least 70 percent of the respondents indicating that the duty areas were performed. Duty areas of Prepare Specific Program Plans, Conduct Programs, and Develop and Maintain Public Relations had at least 90 percent of the respondents indicating the performance of these duties.

For all 14 duty areas, the Area and State Administrators perceived more Extension 4-H and Youth Leaders performing the duty areas than any of the other respondent groups. For 12 of the 14 duty areas, the 4-H Expansion and Review Committee perceived fewer Extension 4-H and Youth Leaders performing the duty areas than any other respondent group.

Number of years in present position There was insufficient evidence to reject the null hypothesis when number of years of service of the respondents in their present positions was the independent variable. When applied to the individual duty areas, the null hypothesis was rejected for only one duty area.

Recruit, Train and Utilize Lay Leaders was identified by significantly fewer than expected respondents with less than one year of service as a duty area to be performed by the Extension 4-H and Youth Leader. In Table 23 the duty is identified. This duty area is one of the five duty areas in the program execution category.

All duty areas had at least 70 percent of the respondents, regardless of length of service, indicating that the duty areas were performed. Duty areas of Prepare Annual Plan of Work; Conduct Programs; and Develop and Maintain Public Relations had 90 percent or more of the respondents indicating the duty was performed.

Table 23. Duty areas performed with significant differences when respondents were classified by number of years in present position

Duty Area	Percent of Respondents Indicating That the Duties Were Performed			Probability Level
	Less than one year	One to three yrs.	More than three yrs.	
Recruit, Train, and Utilize Lay Leaders	87.5*	93.5	97.6	.02

* Indicates where the actual and expected distribution difference was the largest.

The respondents with four or more years of service perceived more Extension 4-H and Youth Leaders performing 10 of the 14 duty areas than any of the other respondent groups. For 10 of the 14 duty areas, respondents with less than one year of service perceived fewer Extension 4-H and Youth Leaders performing the duty than any other respondent groups.

Sex classification There was insufficient evidence to reject the null hypothesis when the sex classification of the respondents was the independent variable. When applied to the individual duty areas, there was also insufficient evidence to reject the null hypothesis for any of the 14 duty areas.

The sex classification of the respondents did not make a significant difference in the perception of the performance of the duty areas.

All 14 duty areas had at least 70 percent of the respondents, regardless of their sex classification, indicating that the duty was performed. Duty areas of Prepare Annual Plan of Work; Prepare Specific Program Plans; Conduct Programs; Recruit, Train, and Utilize Lay Leaders; and Develop and Maintain Public Relations had at least 90 percent of the respondents indicating that the duty areas were performed. For 8 of the 14 duty areas, male respondents perceived more Extension L-H and Youth Leaders performing the duty areas than the female respondents.

Educational level completed by respondents The null hypothesis was rejected when the educational level of the respondents was the independent variable. When applied to the individual duty areas, the null hypothesis was rejected for four of the 14 duty areas.

In Table 24 the duty areas are identified where significant differences were noted. Three of the four duty areas had significantly fewer respondents who had completed a high school education than expected reported the duties as being performed.

Contributing to the significant differences were the respondents with bachelor's degrees. For duty areas of Evaluate Program Effectiveness; Report Activities, Impact and Accomplishments; and Maintain and Increase Personal Professional Competencies, more respondents with a bachelor's degree than would be expected indicated that the duty areas were performed.

The four duty areas with significant differences were again distributed throughout each of the three categories of duty areas. The

Table 24. Duty areas performed with significant differences when classified by educational level completed by respondents

Duty Area	Percent of Respondents Who Indicated That the Duties Were Performed					Probability Level
	Group 1 ^a	Group 2 ^a	Group 3 ^a	Group 4 ^a	Group 5 ^a	
Respond to Client Requests for Technical Assistance	64.7	61.9*	77.4	74.7	85.4	.02
Evaluate Program Effectiveness	94.1	80.3*	87.8	94.7	97.6	.01
Report Activities, Impact, and Accomplishments	64.7	79.6	81.7	89.5*	95.1	.02
Maintain and Increase Personal Professional Competencies	64.7	72.8*	83.9	93.7	100	<.001

^aGroup 1 = Respondents who completed 11th grade or less; Group 2 = Respondents who are high school graduates; Group 3 = Respondents who have a trade, business or technical school diploma or one to three years of college; Group 4 = Respondents who are college (four year) graduates; Group 5 = Respondents who have graduate degrees.

* Indicates where the actual and expected distribution difference was the largest.

program related category had two duty areas with significant differences, while the other two categories each had one duty area.

Nine of the 14 duty areas were perceived as being performed by the Extension 4-H and Youth Leaders by at least 70 percent of the respondents regardless of the educational level. Those nine duty areas were: Assess Community Needs; Prepare Annual Plan of Work; Prepare Specific Program Plans; Conduct Programs; Respond to Client Requests for Specific Information; Recruit, Train, and Utilize Lay Leaders; Evaluate Program Effectiveness; Develop and Maintain Public Relations; and Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture.

Only one duty area, Prepare Specific Program Plans, was perceived as being performed by the Extension 4-H and Youth Leader by 90 percent or more of the respondents regardless of the educational level completed.

For all 14 duty areas, the respondents with graduate degrees perceived more Extension 4-H and Youth Leaders performing the duty areas than any of the respondent groups. For eight of the 14 duty areas, the respondents with less than a high school education perceived fewer 4-H and Youth Leaders performing the duty areas than any of the other respondent groups.

Type of geographical assignment of the professional Extension 4-H and Youth Leaders The null hypothesis was rejected when the type of geographic assignment of the Extension 4-H and Youth Leaders was the

the independent variable. When applied to the individual duty areas, the null hypothesis was rejected for four of the 14 duty areas. In Table 25 the duty areas are identified where the significant differences were noted.

Significantly fewer respondents with full-time single county Extension 4-H and Youth Leaders than expected indicated the duty area of Report Activities, Impact, and Accomplishments was performed. Significantly more respondents from this group than expected reported the performance of the duty area, Supervise Staff.

Significantly fewer respondents with full-time two county Extension 4-H and Youth Leaders than expected perceived the performance of the duty areas of Develop and Maintain Public Relations and Develop and Maintain Staff Relationships within the Extension Service, the University and the State and Federal Departments of Agriculture.

All four duty areas with significant differences were in the program related category.

Twelve of the 14 duty areas were perceived as being performed by at least 70 percent of the respondents when classified according to the type of geographical assignment. For only two duty areas, Respond to Client Requests for Technical Assistance and Supervise Staff, less than 70 percent of at least one respondent group perceived the Extension 4-H and Youth Leaders as performing these duty areas.

Duty areas of Conduct Programs; Recruit, Train, and Utilize Lay Leaders and Prepare Specific Program Plans were rated by over 90 percent of all respondent groups as being performed by the Extension 4-H and

Table 25. Duty areas performed with significant differences when classified by type of geographical assignment of the professional Extension 4-H and Youth Leaders

Duty Area	Percent of Respondents Who Indicated That the Duties Were Performed				Proba- bility Level
	Group 1 ^a	Group 2 ^a	Group 3 ^a	Group 4 ^a	
Report Activities, Impact, and Accomplishments	88.1	76.7*	83.9	100	.02
Develop and Maintain Public Relations	97.6	94.6	89.7*	100	.05
Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture	85.7	84.5	77.4*	100	.03
Supervise Staff	69.0	82.9*	73.5	96.0	.01

^aGroup 1 = Assignment is less than full-time single county; Group 2 = Assignment is full-time single county; Group 3 = Assignment is full-time two county; Group 4 = Area or state assignments.

* Indicates where the actual and expected distribution difference was the largest.

Youth Leaders.

For all duty areas, the respondents with area or state assignments perceived more Extension 4-H and Youth Leaders performing the duty areas than any of the other respondent groups.

Respondents from counties with less than full-time single county Extension 4-H and Youth Leaders perceived fewer Extension 4-H and Youth Leaders performing eight of the 14 duty areas than any of the other respondent groups.

Prior experience as a 4-H member There was insufficient evidence to reject the null hypothesis when prior experience as a 4-H member was the independent variable. When applied to the individual duty areas, there was also insufficient evidence to reject the null hypothesis for any of the 14 duty areas. Prior experience as a 4-H club member did not make a significant difference in perception of duty areas performed.

All duty areas had at least 70 percent of the respondents indicating that the duty area was performed regardless of prior experience as a 4-H member. The duty areas of: Prepare Annual Plan of Work; Prepare Specific Program Plans; Conduct Programs; Respond to Client Requests for Specific Information; Recruit, Train, and Utilize Lay Leaders; and Develop and Maintain Public Relations were rated by over 90 percent of the respondent groups as duty areas that were performed by the Extension 4-H and Youth Leaders.

For 12 of the 14 duty areas the respondents without prior experience as a 4-H member perceived more Extension 4-H and Youth Leaders performing the duty areas than the respondents with prior 4-H experience.

Hypothesis five - Relative time spent on duty area if performed

Hypothesis five states: There is no significant difference in perception of the relative amount of time spent by the professional Extension 4-H and Youth Leaders accomplishing the duties performed when classified by the selected characteristics of:

- a. Position of respondents
- b. Number of years in present position
- c. Sex classification
- d. Educational level completed by respondents
- e. Type of geographical assignment of the professional Extension 4-H and Youth Leaders
- f. Prior experience as a 4-H member

The respondents were asked to report the relative amount of time spent on each duty area if they had indicated that the duty area was performed by the Extension 4-H and Youth Leaders. The relative amount of time spent was evaluated utilizing a nine-point scale, ranging from one as extremely low to nine as extremely high.

The one way classification analysis of variance followed with Duncan's test used to analyze the data for this hypothesis. The respondent characteristics identified in the hypothesis will be discussed separately.

Position of respondents The null hypothesis was rejected when the position of the respondent was the independent variable. When applied to the individual duty areas, the null hypothesis was rejected for seven of the 14 duty areas. Identified in Table 26 are the duty areas where significant differences were noted.

On two duty areas, Prepare Specific Program Plans and Respond to Client Requests for Technical Assistance, there is a significant

Table 26. Analysis of variance and Duncan's test of differences of relative time spent when classified by position of respondents

Duty Area ^b	Mean scores ordered from low to high (left to right) with respondent groups indicated. Lines under means indicate means with no significant differences at the .05 level of significance.										F Value	Probability Level
	Group ^a	Mean	Group ^a	Mean	Group ^a	Mean	Group ^a	Mean	Group ^a	Mean		
1	<u>5</u>	<u>3.809</u>	<u>4</u>	<u>3.944</u>	<u>3</u>	<u>5.467</u>	<u>1</u>	<u>5.867</u>	<u>2</u>	<u>6.264</u>	11.84	< .001
2	<u>5</u>	<u>3.523</u>	<u>4</u>	<u>4.512</u>	<u>1</u>	<u>5.691</u>	<u>3</u>	<u>5.967</u>	<u>2</u>	<u>6.063</u>	9.94	< .001
3	<u>5</u>	<u>5.142</u>	<u>4</u>	<u>6.282</u>	<u>1</u>	<u>6.421</u>	<u>2</u>	<u>6.490</u>	<u>3</u>	<u>6.833</u>	3.74	.01
5	<u>5</u>	<u>4.381</u>	<u>4</u>	<u>5.125</u>	<u>1</u>	<u>5.870</u>	<u>3</u>	<u>6.010</u>	<u>2</u>	<u>6.032</u>	4.33	.01
6	<u>5</u>	<u>2.650</u>	<u>4</u>	<u>4.032</u>	<u>1</u>	<u>5.452</u>	<u>3</u>	<u>5.541</u>	<u>2</u>	<u>5.907</u>	12.75	< .001
7	<u>3</u>	<u>6.247</u>	<u>1</u>	<u>6.466</u>	<u>2</u>	<u>6.673</u>	<u>4</u>	<u>7.425</u>	<u>5</u>	<u>7.666</u>	4.45	.01
8	<u>5</u>	<u>4.285</u>	<u>2</u>	<u>4.721</u>	<u>4</u>	<u>4.850</u>	<u>3</u>	<u>5.000</u>	<u>1</u>	<u>5.434</u>	2.92	.03

^aGroups appear the same as those listed on page 115.

^bDuty Area 1 = Assess Community Needs; Duty Area 2 = Prepare Annual Plan of Work; Duty Area 3 = Prepare Specific Program Plans; Duty Area 5 = Respond to Client Requests for Specific Information; Duty Area 6 = Respond to Client Requests for Technical Assistance; Duty Area 7 = Recruit, Train, and Utilize Lay Leaders; Duty Area 8 = Evaluate Program Effectiveness.

difference noted between the two professional staff groups. The Extension 4-H and Youth Leaders indicated that these duty areas are more time consuming than perceived by the Area and State Administrators.

Likewise, for two other duty areas, Assess Community Needs and Evaluate Program Effectiveness, a significant difference was shown between the three volunteer groups. No pattern is evident in these two duty areas within the three volunteer groups.

For duty areas, Assess Community Needs; Prepare Annual Plan of Work; Respond to Client Requests for Specific Information; and Respond to Client Requests for Technical Assistance, the professional staff perceived the duty areas as consuming significantly less time than the three volunteer groups. In duty area of Recruit, Train, and Utilize Lay Leaders, the two professional staff groups perceived this area as consuming significantly more time than did the volunteer groups.

The seven duty areas in Table 26 with significant differences are clustered in only two of the three general categories.

The program execution category had the greatest number of duty areas with significant differences. There were four duty areas in this category. The program related category had the other three significantly different duty areas.

In the analysis of the data, the lay volunteer leaders perceived the duty areas as consuming more time than do the two professional groups. For seven of the 14 duty areas, the mean scores of the three volunteer groups were higher than either of the professional groups. In three additional duty areas, the volunteer groups have mean scores higher than one of the professional groups. In only two

duty areas do the mean scores of both professional groups exceed the mean scores of the volunteer groups. Those two duty areas were Conduct Programs; and Recruit, Train, and Utilize Lay Leaders.

The Area and State Administrators tended to perceive the duty areas as consuming less time than the other respondent groups. On 11 duty areas, the administrative group had the lowest mean score.

When classified by position, the five respondent groups perceived the duty of Recruit, Train, and Utilize Lay Leaders and Prepare Specific Program Plans as the most time consuming with each respondent group mean score above 5.5. Perceived as the least time consuming were the duty areas of Perform Administrative Functions and Supervise Staff.

Number of years in present position The null hypothesis was rejected when the number of years in the present position of the respondents was the independent variable. When applied to the individual duty areas, the null hypothesis was rejected for four of the 14 duty areas.

Identified in Table 27 are the duty areas where significant differences were noted. The mean scores of the respondent group with four or more years of service were significantly lower for two duty areas and significantly higher for the other two duty areas than at least one other respondent group. Each of the categories of program related and program execution had two of the duty areas with significant differences. In analyzing the data for all 14 duty areas, the respondents with 4 or more years of service perceived 10 of the duty areas as consuming less time than did those with fewer years of service. For

Table 27. Analysis of variance and Duncan's test of differences of relative time spent when respondents were classified by number of years in present position

Mean scores ordered from low to high (left to right) with respondent groups indicated. Lines under means indicate means with no significant differences at the .05 level of significance.								
Duty Area ^b	Group ^a	Mean	Group ^a	Mean	Group ^a	Mean	F Value	Probability Level
1	<u>3</u>	<u>4.923</u>	<u>1</u>	<u>5.684</u>	<u>2</u>	<u>5.892</u>	5.94	.01
4	<u>1</u>	<u>6.011</u>	<u>2</u>	<u>6.625</u>	<u>3</u>	<u>7.120</u>	9.44	< .001
7	<u>1</u>	<u>6.195</u>	<u>2</u>	<u>6.606</u>	<u>3</u>	<u>6.983</u>	4.14	.02
9	<u>3</u>	<u>4.401</u>	<u>2</u>	<u>4.468</u>	<u>1</u>	<u>5.108</u>	3.42	.04

^aGroup 1 = Respondents with less than one year of service in present position; Group 2 = Respondents with one to three years of service in present position; Group 3 = Respondents with four or more years of service in present position.

^bDuty Area 1 = Assess Community Needs; Duty Area 4 = Conduct Programs; Duty Area 7 = Recruit, Train, and Utilize Lay Leaders; Duty Area 9 = Report Activities, Impact, and Accomplishments.

the other four duty areas the respondents with the greatest length of service perceived the duty areas as more time consuming. These four duty areas were: Conduct Programs: Recruit, Train, and Utilize Lay Leaders; Evaluate Program Effectiveness; and Maintain and Increase Personal Professional Competencies.

The respondents with less than one year of service perceived 8 of the duty areas as consuming more time than the other two respondent groups.

When classified by years of service, the three respondent groups perceived the duty areas of Conduct Programs; Recruit, Train, and Utilize Lay Leaders; Prepare Specific Program Plans; and Respond to Client Requests for Specific Information as the most time consuming. Each of these duty areas had mean scores of 5.5 or above. The duty areas of Perform Administrative Functions and Supervise Staff were perceived as the least time consuming followed closely by the duty areas of Report Activities, Impact, and Accomplishments; Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture; and Maintain and Increase Personal Professional Competencies.

Sex classification The null hypothesis was rejected when the sex classification of the respondents was considered as the independent variable. When applied to the individual duty areas, the null hypothesis was rejected for three of the 14 duty areas. Identified in Table 28 are the duty areas with significant differences.

In the three duty areas where significant differences were noted, the male respondent group perceived the duty area as consuming

Table 28. Analysis of variance with significant differences of relative time spent when respondents were classified by sex

Duty Area	Mean Score of Two Respondent Groups		Proba- bility Level*
	Male	Female	
Prepare Annual Plan of Work	5.358	5.880	.03
Prepare Specific Program Plans	6.128	6.824	<.001
Develop and Maintain Public Relations	5.359	5.835	.03

*Utilizing the .05 level of significance.

relatively less time than did the female respondents.

Two of the significantly different duty areas were part of the program related category while the remaining duty area was in the program execution category.

The female respondents perceived 8 duty areas as more time consuming than did the male respondents.

Four duty areas with mean scores of 5.5 or greater were perceived as high in relative time spent. Those were: Prepare Specific Program Plans; Conduct Programs; Recruit, Train, and Utilize Lay Leaders; and Respond to Client Requests for Specific Information. Five duty areas were perceived as the lowest in relative time spent. These were: Perform Administrative Functions; Report Activities, Impact, and Accomplishments; Develop and Maintain Staff Relationships within the Extension

Service, the University, and the State and Federal Departments of Agriculture; Supervise Staff; and Maintain and Increase Personal Professional Competencies.

Educational level completed by respondents The null hypothesis was rejected when the educational level of the respondents was considered as the independent variable. When applied to the individual duty areas, the null hypothesis was rejected for ten of the 14 duty areas. Identified in Table 29 are the ten duty areas where significant differences were noted.

Respondents with graduate degrees perceived the relative time spent significantly different in eight of the duty areas when compared to other educational respondent groupings. For seven of these duty areas, the significant difference is with the respondents classified as high school graduates. For six of the eight duty areas, significant differences were also noted with respondents who completed 11th grade or less.

The ten significantly different duty areas were distributed throughout the three categories of program execution, program related and administrative. The program execution category had five duty areas; the program related category had four duty areas and the administrative category had one duty area.

The three respondent groups with less than a college degree perceived ten duty areas to be more time consuming than did the respondents with the additional education. The respondents with less than a high school education perceived 7 duty areas as more time consuming

Table 29. Analysis of variance and Duncan's test of differences of relative time spent when classified by educational level completed by respondents

Duty Area ^b	Mean scores ordered from low to high (left to right) with respondent groups indicated. Lines under means indicate means with no significant differences at the .05 level of significance.										F Value	Proba- bility Level
	Group ^a	Mean	Group ^a	Mean	Group ^a	Mean	Group ^a	Mean	Group ^a	Mean		
1	5	4.108	4	5.063	2	5.862	3	6.040	1	6.500	7.26	< .001
2	5	4.463	4	5.102	1	6.000	2	6.000	3	6.024	6.31	< .001
3	1	5.437	5	5.750	2	6.534	4	6.604	3	6.724	3.30	.02
4	1	5.733	2	6.416	4	6.758	3	6.776	5	7.219	2.59	.04
5	5	5.073	4	5.333	3	6.012	2	6.078	1	6.200	3.37	.01
6	5	3.314	4	4.867	1	5.454	3	5.718	2	5.816	10.47	< .001
7	2	6.310	1	6.466	3	6.500	4	6.954	5	7.365	3.14	.02
9	4	4.120	5	4.282	3	4.733	1	4.818	2	4.929	2.49	.05
11	4	3.840	5	4.150	3	4.881	2	5.008	1	5.076	4.71	.001
13	5	3.605	4	3.794	2	4.704	3	4.743	1	6.545	5.64	.001

^aGroups appear the same as those listed on page 120.

^bDuty Area 1 = Assess Community Needs; Duty Area 2 = Prepare Annual Plan of Work; Duty Area 3 = Prepare Specific Program Plans; Duty Area 4 = Conduct Programs; Duty Area 5 = Respond to Client Requests for Specific Information; Duty Area 6 = Respond to Client Requests for Technical Assistance; Duty Area 7 = Recruit, Train, and Utilize Lay Leaders; Duty Area 9 = Report Activities, Impact, and Accomplishments; Duty Area 11 = Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture; Duty Area 13 = Perform Administrative Functions.

than any of the other four respondent groups. The respondents with graduate degrees perceived 8 duty areas as less time consuming.

The duty areas of Recruit, Train, and Utilize Lay Leaders; and Conduct Programs were perceived as the most time consuming. The duty area of Prepare Specific Program Plans followed closely when the respondents were classified by educational level. Duty areas of Report Activities, Impact, and Accomplishments; and Supervise Staff were perceived as the least time consuming by respondents when classified by educational level.

Type of geographical assignment of the professional Extension 4-H and Youth Leaders The null hypothesis was rejected when the type of geographical assignment of the Extension 4-H and Youth Leaders was the independent variable. When applied to the individual duty areas, the null hypothesis was rejected for six of the 14 duty areas. Identified in Table 30 are the duty areas where significant differences were noted.

In each of the six duty areas, the respondents with area or state assignments perceived the duty areas as significantly less time consuming than the other respondent groupings.

In duty area, Respond to Client Requests for Specific Information, there was a significant difference noted between the respondents who have a single-county less than full time Extension 4-H and Youth Leader and the respondents who have a two-county Extension 4-H and Youth Leader. The six duty areas are equally distributed among the categories of program execution and program related.

Table 30. Analysis of variance and Duncan's test of differences of relative time spent when classified by type of geographical assignment of the professional Extension 4-H and Youth Leaders

Duty Area ^b	Mean scores ordered from low to high (left to right) with respondent groups indicated. Lines under means indicate means with no significant differences at the .05 level of significance ^a								F Value	Probability Level
	Group ^a	Mean	Group ^a	Mean	Group ^a	Mean	Group ^a	Mean		
1	4	<u>3.916</u>	1	<u>5.375</u>	3	<u>5.732</u>	2	<u>5.740</u>	5.04	.01
2	4	<u>3.440</u>	1	<u>5.683</u>	2	<u>5.684</u>	3	<u>5.889</u>	9.83	< .001
3	4	<u>4.920</u>	1	<u>6.500</u>	3	<u>6.507</u>	2	<u>6.709</u>	6.63	.001
5	4	<u>4.360</u>	3	<u>5.674</u>	2	<u>5.864</u>	1	<u>6.289</u>	6.01	.001
6	4	<u>2.956</u>	3	<u>5.311</u>	2	<u>5.363</u>	1	<u>5.745</u>	9.88	< .001
10	4	<u>4.600</u>	3	<u>5.500</u>	2	<u>5.725</u>	1	<u>5.825</u>	2.79	.04

^aGroups appear the same as those listed on page 123.

^bDuty Area 1 = Assess Community Needs; Duty Area 2 = Prepare Annual Plan of Work; Duty Area 3 = Prepare Specific Program Plans; Duty Area 5 = Respond to Client Requests for Specific Information; Duty Area 6 = Respond to Client Requests for Technical Assistance; Duty Area 10 = Develop and Maintain Public Relations.

The respondents with an area or state assignment perceived the duty areas as requiring less relative time spent than any other respondent group. This group had the lowest mean score for 11 of the 14 duty areas. The respondents from counties with a full-time single-county Extension 4-H and Youth Leader perceived the duty areas as the most time consuming.

Duty areas of Recruit, Train, and Utilize Lay Leaders; and Conduct Programs were perceived as the most time consuming, having a mean score of 5.5 or greater while duty areas of Perform Administrative Functions and Supervise Staff were perceived as the least time consuming.

Prior experience as a 4-H member There was insufficient evidence to reject the null hypothesis when prior experience as a 4-H member was the independent variable. When applied to the individual duty areas, there was also insufficient evidence to reject the hypothesis for any of the 14 duty areas.

Prior experience as a 4-H member does not make a significant difference in respondents' perceptions of the relative time spent performing the 14 duty areas.

The respondents with prior 4-H experience tended to rate the relative amount of time spent lower than did those without prior experience. The mean score for the respondents with prior experience as a 4-H member was lower for 11 of the duty areas.

The respondents when classified by prior experience perceived the duty areas of: Prepare Specific Program Plans; Conduct Programs; Recruit, Train, and Utilize Lay Leaders; Respond to Client Requests

for Specific Information; and Develop and Maintain Public Relations as the most time consuming duty areas.

Least time consuming duty areas were: Supervise Staff; Perform Administrative Functions; Report Activities, Impact, and Accomplishments; and Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture.

Hypothesis six - Relative criticality of duty area if performed

Hypothesis six states: There is no significant difference in perceptions of relative criticality of the duties performed by the Extension 4-H and Youth Leaders when classified by selected characteristics of:

- a. Position of respondent
- b. Number of years in present position
- c. Sex classification
- d. Educational level completed by respondents
- e. Type of geographical assignment of the professional Extension 4-H and Youth Leaders
- f. Prior experience as a 4-H member

The respondents were asked to report on the relative criticality of performing each duty area, if they had indicated that the duty area was performed by the Extension 4-H and Youth Leader.

The relative criticality was evaluated utilizing a 9-point scale, ranging from one as extremely low to nine as extremely high. The one way classification analysis of variance, followed with Duncan's test, was used to analyze the data for this hypothesis. The respondent characteristics identified in the hypothesis will be discussed separately.

Position of the respondent The null hypothesis was rejected when the position of respondent was the independent variable. When applied to the individual duty areas, the null hypothesis was

rejected for four of the 14 duty areas.

Identified in Table 31 are the duty areas where significant differences were noted.

For each of the duty areas with significant differences, the two professional staff groups were significantly different from at least two of the lay volunteer groups. For duty areas, Prepare Annual Plan of Work and Respond to Client Requests for Technical Assistance, the professional mean scores were significantly lower than the three lay volunteer groups while the reverse was true for duty areas Recruit, Train, and Utilize Lay Leaders; and Evaluate Program Effectiveness.

The categories of program related and program execution each had two duty areas with significant differences.

The data would also suggest that there are differences in the general perception of the relative criticality of the duty areas.

According to the mean score, the Extension 4-H and Youth Leaders perceived five of the duty areas as more critical than the other four respondent groups. An additional four duty areas were perceived by the Extension 4-H and Youth Leaders as being more critical than three respondent groups.

The 4-H Expansion and Review Committee perceived the relative criticality of the duty areas lower than the other respondent groups. They perceived five duty areas as the least critical of any of the respondent groups.

All respondent groups perceived the duty areas of: Conduct Programs;

Table 31. Analysis of variance and Duncan's test of differences based on relative criticality when classified by position of respondents

Mean scores ordered from low to high (left to right) with respondent groups indicated. Lines under means indicate means with no significant difference at the .05 level of significance.												F Value	Probability Level
Duty Area ^b	Group ^a	Mean	Group ^a	Mean	Group ^a	Mean	Group ^a	Mean	Group ^a	Mean			
2	5	5.428	4	5.700	1	6.226	2	6.542	3	6.708		3.16	.02
6	5	3.650	4	4.903	2	5.906	3	5.952	1	6.025		7.77	< .001
7	3	6.360	1	6.666	2	6.762	5	8.190	4	8.365		12.15	< .001
8	2	5.250	3	5.360	1	5.373	4	6.317	5	6.428		3.93	.01

^aGroups appear the same as those listed on page 115.

^bDuty Area 2 = Prepare Annual Plan of Work; Duty Area 6 = Respond to Client Requests for Technical Assistance; Duty Area 7 = Recruit, Train, and Utilize Lay Leaders; Duty Area 8 = Evaluate Program Effectiveness.

Recruit, Train, and Utilize Lay Leaders; Prepare Specific Program Plans; Assess Community Needs; and Develop and Maintain Public Relations as the most critical, based on mean scores of 5.5 or greater, to the successful accomplishment of the position of the Extension 4-H and Youth Leader. The duty areas of: Perform Administrative Functions; Report Activities, Impact, and Accomplishments; and Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture were perceived as the least critical to the position.

Number of years in present position The null hypothesis was rejected when the years of service of the respondents was the independent variable. When applied to the individual duty areas, the null hypothesis was rejected for three duty areas. Identified in Table 32 are the duty areas where significant differences were noted.

In each duty area with significant differences, the respondents with less than one year of service perceived a significantly lower level of relative criticality than at least one other respondent group with greater length of service.

The respondents with four or more years of service perceived duty areas Conduct Programs; and Recruit, Train, and Utilize Lay Leaders as significantly more critical than the respondents with less than one year of service. The reverse was true for the duty area of Perform Administrative Functions as the respondents with four or more years of service perceived this duty area as significantly less critical than those with one to three years of service.

Table 32. Analysis of variance and Duncan's test of differences based on relative criticality when respondents were classified by number of years in present position

Duty Area ^b	Group ^a	Mean scores ordered from low to high (left to right) with respondent groups indicated. Lines under means indicate means with no significant differences at the .05 level of significance.					F Level	Proba- bility Level
		Mean	Group ^a	Mean	Group ^a	Mean		
4	1	6.494	2	6.864	3	7.147	3.13	.05
7	1	6.448	2	6.993	3	7.130	3.25	.04
13	3	4.186	1	4.394	2	5.091	4.97	.01

^aGroups appear the same as those listed on page 129.

^bDuty Area 4 = Conduct Programs; Duty Area 7 = Recruit, Train, and Utilize Lay Leaders; Duty Area 13 = Perform Administrative Functions.

For this classification, the program execution category had two duty areas with significant differences with the third duty area in the administrative category.

Seven of the 14 duty areas had mean scores of 5.5 or greater for all respondent groups. The group with one to three years experience perceived 7 of the duty areas as the most critical based on an evaluation of the mean scores. The respondents with the greatest length of service, four or more years, perceived 8 of the 14 duty areas as less critical than either of the other groupings.

The respondents perceived duty areas of Conduct Programs; Recruit, Train, and Utilize Lay Leaders; and Prepare Specific Program Plans (three of the 14 duty areas) as the most critical. The duty areas of Perform Administrative Functions; Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture; Report Activities, Impact and Accomplishments; and Supervise Staff were perceived as the least critical to the satisfactory performance of the role of the Extension 4-H and Youth Leader.

Sex classification There was insufficient evidence to reject the null hypothesis when the sex of the respondents was considered as the independent variable. When applied to the individual duty areas, the null hypothesis was rejected only for the duty area of Supervise Staff, which is included in the administrative category. Rejecting this one duty area does not meet the standards set for rejection of the general form of the null hypothesis.

The male respondents perceived eight of the 14 duty areas as

more critical than the female respondents, based on mean score comparisons.

For both respondent groups, 8 of the 14 duty areas had mean scores of 5.5 or greater. Duty areas of Conduct Programs and Recruit, Train, and Utilize Lay Leaders were perceived as the most critical while Report Activities, Impact, and Accomplishments; and Perform Administrative Functions were perceived as the least critical.

Educational level completed by respondents The null hypothesis was rejected when the educational level of the respondents was the independent variable. When applied to the individual duty areas, the null hypothesis was rejected for six duty areas. Identified in Table 33 are the duty areas where significant differences were noted.

A review of Table 33 suggests that levels of education have an effect on perception of relative criticality, but there seems to be no consistent pattern involved.

The group with less than a high school education was significantly different from at least one other grouping for four of the six duty areas. The high school graduate respondents were significantly different for five of the six duty areas. The respondents with some education beyond high school showed significant differences for each of the six duty areas with at least one of the other groupings. The groups with college degrees and graduate degrees were significantly different for five and four duty areas, respectively, with at least one other group.

Table 33. Analysis of variance and Duncan's test of differences based on relative criticality when classified by educational level completed by respondents

Mean scores ordered from low to high (left to right) with respondent groups indicated. Lines under means indicate means with no significant difference at the .05 level of significance.												F Value	Probability Level
Duty Area ^b	Group ^a	Mean	Group ^a	Mean	Group ^a	Mean	Group ^a	Mean	Group ^a	Mean			
3	<u>1</u>	<u>5.153</u>	<u>5</u>	<u>6.650</u>	<u>4</u>	<u>6.720</u>	<u>2</u>	<u>6.739</u>	<u>3</u>	<u>6.817</u>	2.53	.05	
6	<u>5</u>	<u>4.142</u>	<u>1</u>	<u>5.500</u>	<u>4</u>	<u>5.731</u>	<u>3</u>	<u>5.850</u>	<u>2</u>	<u>6.112</u>	6.43	.001	
7	<u>2</u>	<u>6.196</u>	<u>1</u>	<u>6.333</u>	<u>3</u>	<u>6.746</u>	<u>4</u>	<u>7.689</u>	<u>5</u>	<u>7.902</u>	12.73	< .001	
11	<u>4</u>	<u>4.320</u>	<u>5</u>	<u>4.675</u>	<u>3</u>	<u>4.831</u>	<u>1</u>	<u>5.111</u>	<u>2</u>	<u>5.710</u>	5.37	.001	
12	<u>3</u>	<u>4.464</u>	<u>4</u>	<u>5.070</u>	<u>5</u>	<u>5.439</u>	<u>2</u>	<u>5.468</u>	<u>1</u>	<u>5.500</u>	3.14	.02	
13	<u>4</u>	<u>3.957</u>	<u>5</u>	<u>4.473</u>	<u>2</u>	<u>4.869</u>	<u>3</u>	<u>4.927</u>	<u>1</u>	<u>6.000</u>	3.01	.02	

^aGroups appear the same as those listed on page 120.

^bDuty Area 3 = Prepare Specific Program Plans; Duty Area 6 = Respond to Client Requests for Technical Assistance; Duty Area 7 = Recruit, Train, and Utilize Lay Leaders; Duty Area 11 = Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture; Duty Area 12 = Maintain and Increase Personal Professional Competencies; Duty Area 13 = Perform Administrative Functions.

Each of the three categories had duty areas of significant differences. The program execution category had three duty areas; the program related category had one duty area while the administrative category had the remaining two duty areas.

The respondents with graduate degrees perceived three duty areas as less critical than any of the other respondent groups, and five additional duty areas as less critical than three of the respondent groups. The respondents who completed high school perceived four duty areas as more critical than did any of the other groupings. An additional four duty areas were perceived as more critical than three other respondent groups.

Five of the 14 duty areas had mean scores of 5.5 or greater. The respondents indicated duty areas of Conduct Programs; and Recruit, Train, and Utilize Lay Leaders as the most critical with duty areas of Report Activities, Impact, and Accomplishments; Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture; Perform Administrative Functions; Maintain and Increase Personal Professional Competencies; and Supervise Staff as the least critical.

Type of geographical assignment of the professional Extension

4-H and Youth Leaders The null hypothesis was rejected when the type of the assignment of the Extension 4-H and Youth Leaders was the independent variable. When applied to the individual duty areas, the null hypothesis was rejected for four of the 14 duty areas. Identified

Table 34. Analysis of variance and Duncan's test of differences based on relative criticality when classified by type of geographical assignment of the professional Extension 4-H and Youth Leaders

Duty ^b Area	Mean scores ordered from low to high (left to right) with respondent groups indicated. Lines under means indicate means with no significant differences at the .05 level of significance.								F Value	Proba- bility Level
	Group ^a	Mean	Group ^a	Mean	Group ^a	Mean	Group ^a	Mean		
5	4	5.280	3	6.079	1	6.319	2	6.428	2.67	.05
6	4	3.956	3	5.676	1	5.846	2	5.988	6.53	.001
7	1	6.613	3	6.873	2	6.921	4	8.000	3.44	.02
8	3	5.241	2	5.495	1	5.750	4	6.480	3.45	.02

^aGroups appear the same as those listed on page 123.

^bDuty Area 5 = Respond to Client Requests for Specific Information; Duty Area 6 = Respond to Client Requests for Technical Assistance; Duty Area 7 = Recruit, Train, and Utilize Lay Leaders; Duty Area 8 = Evaluate Program Effectiveness.

in Table 34 are the duty areas where significant differences were noted.

In each of the four duty areas with significant differences, the respondents with area or state assignments perceived the duty area significantly different than the respondents from counties with full time single-county Extension 4-H and Youth Leaders. In duty areas Respond to Client Requests for Specific Information and Respond to Client Requests for Technical Assistance, the respondents with full time single-county Extension 4-H and Youth Leaders perceived the duty areas as more critical than the respondents with area and state assignments.

Three of the duty areas are in the program execution category, and the fourth duty is in the program related category.

The respondents from the counties with full time single-county Extension 4-H and Youth Leaders perceived 6 of the 14 duty areas as more critical to the satisfactory performance of the role of the Extension 4-H and Youth Leader. The respondents with less than full time single-county Extension 4-H and Youth Leaders perceived 6 of the 14 duties as the least critical among the four respondent groups.

Five of the 14 duty areas had mean scores of 5.5 or greater. Duty areas of: Recruit, Train, and Utilize Lay Leaders; Conduct Programs; and Prepare Specific Program Plans were perceived as the most critical. The duty areas of: Perform Administrative Functions; Report Activities, Impact, and Accomplishments; Supervise Staff; and Maintain and Increase Personal Professional Competencies were perceived as the least critical.

Prior experience as a 4-H member There was insufficient evidence to reject the null hypothesis when the prior experience as a 4-H member was the independent variable. There was no significant difference noted between the two respondent groups in this classification for any of the 14 duty areas.

Based on a comparison of the mean scores, those with prior experience as a 4-H member tended to perceive the tasks as less critical than those without experience as a 4-H member. For nine duty areas, the mean score of those with prior experience was lower than those respondents without experience.

Eight of the duty areas had mean scores of 5.5 or greater. Duty areas of Recruit, Train, and Utilize Lay Leaders; Conduct Program; and Prepare Specific Program Plans were perceived as the most critical, while duty areas Prepare Annual Plan of Work; Report Activities, Impact, and Accomplishments; Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture; and Respond to Client Requests for Technical Assistance were perceived as the least critical.

Hypothesis seven - Difficulty of performing duty area

Hypothesis seven states: There is no significant difference between professional Extension 4-H and Youth Leaders' and their Area and State Administrators' perceptions of the relative difficulty of the duties performed by the Extension 4-H and Youth Leaders.

The two professional staff groups were asked to evaluate the

relative difficulty of performing the 14 duty areas. The nine-point scale, with one as extremely low and nine as extremely high, was used to evaluate the relative difficulty of the duty areas. Relative difficulty was defined by AIR as how hard it is to achieve the objectives of the duty due to one or more of the following: (1) The knowledge, skills, and abilities required; (2) The resources normally available for accomplishing the duty; (3) Situational characteristics of the environments in which the duty is carried out.

The students' *t* test was used to evaluate the data for this section of the questionnaire.

There was insufficient evidence to reject the null hypothesis. There were no significant differences noted between the two professional groups in terms of relative difficulty for any of the 14 duty areas.

Neither group tended to perceive the tasks as relatively more difficult. Based on comparison of the mean scores, each group had seven of the duty areas rated as more difficult.

CONCLUSIONS AND RECOMMENDATIONS

The conclusions and recommendations which follow are a result of this study. They may be applied to the position of Extension 4-H and Youth Leaders who are employed by the Iowa CES.

This chapter will be divided into three sections. Conclusions based on the data analysis are presented in section one; the recommendations for consideration by the administration and professional staff related to the 4-H program of the Iowa CES are presented in section two; and the recommendations for further study as an outgrowth of this investigation may be found in section three.

Section One - Conclusions

1. There is not general agreement among the respondents of this study as to the responsibilities of the Extension 4-H and Youth Leaders. The respondents in this study differed in their perceptions of which tasks and duty areas were performed, relative amount of time spent and relative criticality of performed tasks and duty areas. This lack of agreement and understanding of the role of the Extension 4-H and Youth Leader's position among those directly and continuously involved with the 4-H program could be one of the contributing factors to the relatively high turnover of Extension 4-H and Youth Leaders.
2. Respondent characteristics were related to the differences in perceptions of the duty areas to be performed by the

Extension 4-H and Youth Leaders. Shown in Table 35 is the summary of the three areas of analysis.

Table 35. Summary of respondent characteristics contributing to significant differences in perception of the duty areas of the Extension 4-H and Youth Leaders

Respondent Characteristics	If Performed	Relative Time Spent	Relative Criticality
Position of Respondents	X	X	X
Number of Years in Present Position		X	X
Sex Classification		X	
Educational Level Completed by Respondents	X	X	X
Type of Geographical Assignment of the Professional Extension 4-H and Youth Leaders	X	X	X

3. The significant differences in perception of duty areas were concentrated in three respondent characteristics. Of the 68 significant differences noted in the three analyses of the duty areas, distribution was as follows: position of the respondent--22, educational level completed--20, type of geographical assignment--14, number of years in present position--8, and sex classification--4.

4. The members of the 4-H Expansion and Review Committee did not appear to perceive the position of the Extension 4-H and Youth Leaders as expressed by the duty areas in the same manner as the other respondent groups. In each of the three areas of analysis, the members of the 4-H Expansion and Review Committee had a different perception of the duty areas.
 - a. The present recommended structure of the 4-H Expansion and Review Committee includes high school age youth as participating members. These young people generally serve only one year on the committee. Therefore, they may not develop as complete an understanding of the duty areas performed as other respondents.
 - b. The members of this committee tended to have fewer years of service than any of the other respondent groupings. The lower term of service could be a contributing factor in the level of perception.
5. Respondents with graduate degrees perceived the relative time spent and criticality of the duty areas differently than the other respondent groups. There was a general tendency that as educational level increased, the perceptions of relative time spent and relative criticality of performing the duty areas decreased. This could be a trend toward central tendency and/or an area where interaction with position of respondents is evident in the study. The number of respondents with graduate

degrees was greater among the Area and State Administrators than any other category of respondents.

6. The type of geographical assignment of the Extension 4-H and Youth Leaders was noted as frequently contributing to the differences in perceptions of the duty area analysis.
 - a. When the analysis related to "Is the duty area performed?", the respondents from counties with single county, full-time Extension 4-H and Youth Leaders perceived the performance of the duty areas differently. A possible explanation for this difference would be that a single county full-time employee would be more visible than employees with a part-time or two county assignment.
 - b. Those respondents with area and state assignments perceived the relative time spent and criticality differently. This difference in perception could possibly be explained by the relative distance and infrequent contacts between the Extension 4-H and Youth Leaders and the Area and State Administrators, particularly the State Administrators. An interaction of respondent characteristics is suggested, particularly the characteristic of position.
7. The respondents with the shortest service tended to perceive the role of the Extension 4-H and Youth Leaders differently than those with greater years of service. As the length of service increases, the understanding and ability to identify the more

important components of position increases and the more nearly they perceive the duty areas performed similar to those respondents actually performing the duty areas. This would also suggest that there is an interaction between years of service and position.

8. When considering the three categories of duty areas, each category had duty areas with significant differences. The general categories of administrative and program execution contributed more frequently to the differences than the program related category. It appears that when the volunteer respondents were included in the results, the actual execution of the 4-H educational program was not well-understood. An example of the lack of understanding was shown when a volunteer leader stated, "County needs a full time 4-H and Youth Leader (male) to help the 4-H club leaders select and prepare livestock for the County and State Fairs."
9. The duty area of Recruit, Train, and Utilize Lay Leaders is extremely important to the successful accomplishment of the Extension 4-H and Youth program. The ability to appropriately utilize volunteer leaders greatly enhances the opportunity for success in the position as well as spreading the professional leadership over a potentially much wider audience. The statement of "one person can't do it all" must be thoroughly incorporated into the operating philosophy of the successful

Extension 4-H and Youth Leaders. Several comments from lay volunteer leaders agreed with this philosophy. "I would hope an Extension and 4-H Youth Leader could recruit persons to do #4 (Conduct Programs) so as to spend more of his time organizing, administrating, etc." Another leader commented, "I believe if the Youth Leader plans her annual work, then specific programs, then recruits and trains 4-H leaders to help, the rest will fall into place. If she or he gets enough good help it will leave them free to do their other duties properly."

10. The respondent characteristic of prior experience as a 4-H club member was not a contributing factor to differences in perception of the duty areas of the Extension 4-H and Youth Leaders.
11. There was general agreement between the Extension 4-H and Youth Leaders and the Area and State Administrators as to the relative difficulty of the duty areas performed.
12. There were significant differences between the Extension 4-H and Youth Leaders and the Area and State Administrators in the perception of the specific tasks performed.
 - a. For 92 of the 125 tasks, the Area and State Administrators indicated that they perceived more of the 4-H and Youth Leaders accomplishing these tasks than did the Extension 4-H and Youth Leaders.
 - b. The Area and State Administrators perceived 113 of the 125

tasks as less time consuming than did the Extension 4-H and Youth Leaders.

- c. The Area and State Administrators rated 104 of the 125 tasks lower in the relative criticality than did the Extension 4-H and Youth Leaders.

13. Each duty area had at least one task of which there was disagreement in one of the three areas of analysis. Forty-six different task statements were found to show a significant difference.

- a. The seven duty areas of the program related category included 19 of the significantly different tasks. This represents 34 percent of the tasks in this category.
- b. The five duty areas of the program execution category had 14 of the significantly different tasks. This is only 28 percent of the tasks of that category.
- c. The remaining 13 tasks are associated with the administrative category which represented 65 percent of the administratively related tasks.

14. There were nine tasks which were particularly troublesome in that significant differences between the Extension 4-H and Youth Leaders and the Area and State Administrators were noted in more than one of the areas of analysis. Identified in Table 36 are these nine task statements.

Table 36. Tasks with associated duty areas which were found to be significantly different for at least two of the hypotheses related to the analysis of the 125 tasks

Duty Area	Task	Significant Differences Determined for		
		Is Task Performed?	Relative Time Spent	Relative Criticality
Prepare Specific Program Plans	Plan material to be covered		X	X
Respond to Client Requests for Technical Assistance	Evaluate implications of possible alternatives with respect to client's situation	X		X
	Demonstrate procedures if necessary	X	X	X
	Follow up results and evaluate impact of assistance given	X	X	X
Develop and Maintain Public Relations	Develop, maintain, and up-date lists for dissemination of information		X	X
	Make visits to promote CES program		X	X
Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture	Share information with other agents and with university personnel		X	X

Table 36, continued

Duty Area	Task	Significant Differences Determined for		
		Is Task Performed?	Relative Time Spent	Relative Criticality
Maintain and Increase Professional Competencies	Take formal education courses	X	X	
Perform Administrative Functions	Provide information for budget preparation	X	X	

15. The duty area of Respond to Client Requests for Technical assistance and the nine tasks associated with this duty area were interpreted differently by the respondents.
 - a. Six of the nine tasks were found to have significant differences in perceptions. The nine tasks of this duty area were perceived as being performed by fewer of the Extension 4-H and Youth Leaders than for 12 of the other 14 duty areas.
 - b. The tasks of this duty area were rated as being among the lowest in terms of relative time spent and relative criticality.
 - c. The nature of the Extension 4-H and Youth Leaders' position with the CES does not emphasize technical subject matter like many other Extension positions do. This could be a contributing factor to the differences noted in this area.
 - d. This investigator suggests that this duty area and associated tasks should not be considered an important part of the position of the Extension 4-H and Youth Leader.
16. The duty area of Perform Administrative Functions and the associated tasks were perceived differently by the respondents.
 - a. Nine of the 13 tasks had significant differences in perception noted. These differences were noted only in the areas of analysis of, "Is the task performed?" and relative time spent.

- b. In the past, the position of Extension 4-H and Youth Leader has been a supporting role to the County Extension Director in the general area of administrative functions.
- 17. Three additional duty areas had at least 50 percent of the respective task statements with significant differences noted in at least one of the areas of analysis.
 - a. The analysis indicated that Evaluating Program Effectiveness is not being performed at the level perceived by the Area and State Administrators. This investigator would suggest that there should be increased utilization of the evaluation processes by the Extension 4-H and Youth Leaders to provide input into the program planning process, a key element in adult education.
 - b. The analysis indicated that the Area and State Administrators perceived the duty area of Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture as consuming less time to perform and as less critical than the Extension 4-H and Youth Leaders. The 4-H and Youth Leaders reported that information giving, generally speaking, is significantly more time consuming than recognized by the Area and State Administrators. This may be a reaction to administrative requests for civil rights related reports and other administratively required reports.

- c. The Extension 4-H and Youth Leaders indicated that the duty area of Maintain and Increase Personal Professional Competencies was more time consuming and more critical than recognized by the Area and State Administrators.
 - (1) Two-thirds of the 4-H and Youth Leaders indicated the task of Taking formal education courses was performed. The Iowa CES is stressing the need for the professional staff to complete a master's degree.
 - (2) Thirty percent of the presently employed Extension 4-H and Youth Leaders possess a master's degree. It would appear that more of the Extension 4-H and Youth Leaders, as professional educators, will be involved with formal course work as an answer to professional improvement.

18. The results of this investigation are generally compatible with the key areas of responsibility of the Extension 4-H and Youth Leaders as summarized in the second chapter. Previous research indicated the following items as key components of the position of the Extension 4-H and Youth Leader: planning and evaluating the County 4-H program, organizing and coordinating clubs, providing information directly, and training local leaders.

- a. This investigation has reaffirmed that training local leaders is an extremely important role component. The

other important duty areas, identified in this investigation, are seen as a refinement and clarification of the role components identified in previous research. This study emphasized the duty area of Preparing of Specific Program Plans. This duty was identified as one of the most important duty areas in this study. In addition, six of the tasks of this duty area are identified as being very important to the role of the Extension 4-H and Youth Leader. The evaluation of the County 4-H program was rated lower in this study. Providing information directly is similar to the duty area of Respond to Client Requests for Specific Information. This duty area was among the top four in this investigation.

- b. The biggest variation was in the area of Organizing and Conducting Clubs. At one time, the area of Organizing and Conducting Clubs was an important component of the role of the Extension 4-H and Youth Leader. This duty area was not emphasized in this study. However, this investigation would suggest that the duty area of Conduct Programs was shown to be critical. This duty area was identified as one of the most important duty areas now being performed. There has been a shift from the serving of individual clubs of the past to the overall county-wide program leadership role through the duty areas of Prepare Specific Program Plans and Conduct Programs. These two duty areas are now

emphasized by the Area and State Administration of the Iowa CES.

19. The respondents did not contribute substantial numbers of new tasks or duty areas which were not at least partially identified in the tasks and duty areas of the utilized questionnaire. Most of the suggestions for additions to the duty areas and task listings included the following:

- a. "Working with Youth: Provide leadership for kids: Visit local 4-H clubs and local improvement shows." All of these suggestions could be specific actions an Extension 4-H and Youth Leader does in the duty area of Conduct Programs.
- b. Also suggested were tasks such as: "Supervise activities at the County Fair: Supervise activities (other than County Fair): Guide County 4-H Councils." These suggestions do not appear to fit into any existing task statements. The addition of the following task statement to the duty area of Conduct Programs is suggested:

Provide guidance, leadership, and supervision to groups and activities.

20. Based on the reaction of several volunteer leaders, the two-county Extension 4-H and Youth Leader positions are difficult assignments. Typical comments were "Two-county positions are nightmares. Two-county positions are too much for one staff member."

Section Two--Recommendations for Consideration

In this section five recommendations will be presented for consideration by the individuals involved with the Extension 4-H and Youth program. These recommendations are based on the analysis of the data included in this study and the conclusions previously listed.

1. There is a need to clarify the duty areas and tasks of the position of the Extension 4-H and Youth Leaders employed by the Iowa CES. The following process is recommended.
 - a. Representatives of Extension 4-H and Youth Leaders and the Area and State Administrators should form an ad hoc committee to develop an extensive role definition based on the key duties and tasks identified in this study.
 - b. The County Agricultural Extension Council members, as joint employers, should be given the opportunity to review and provide input into the ad hoc committee's recommendations.
 - c. The ad hoc committee, with the CES administration support, should conduct an extensive in-service training program to explore and explain the agreed-upon role definition with all presently employed 4-H and Youth Leaders and the Area and State Administrators.
 - d. The agreed-upon role definition should be discussed with the 4-H Expansion and Review Committee and the 4-H Organizational Leaders. Other groups such as the 4-H Project Leaders, County 4-H Council and the County Fair Board could

benefit from a clearer understanding of the role of the Extension 4-H and Youth Leader.

- e. The agreed-upon role definition should be utilized during the orientation and induction training program of newly employed Extension 4-H and Youth Leaders to gain an early understanding of the important tasks and duty areas.
 - f. The agreed-upon role definition should be utilized in the recruitment and selection process for new Extension 4-H and Youth Leaders. There is a need for greater clarity as pointed out by a staff member who stated, "I do feel the job of an Extension staff person is poorly presented to applicants and hope this will help that situation."
 - g. This investigator would suggest that the important tasks and duty areas should be used as background information for the development of a recruiting brochure. The development of an audio-visual presentation based on the important elements would be helpful in the recruitment process.
2. A set of important duty areas and associated tasks can be identified based on this study. These duty areas and tasks should be considered as extremely important to the successful performance of the position of the Extension 4-H and Youth Leader. Criteria used to identify these tasks and duty areas are listed in Appendix K. The identified tasks and duty areas will be grouped into three categories which have been used throughout this study.

- a. Program Execution - This category must be considered first as the five respondent groups indicated the three most important duty areas are in this category. The following duty areas and tasks should be considered as important elements in the role of the Extension 4-H and Youth Leader.

(1) Duty Area - Prepare Specific Program Plans

Tasks - Determine objectives and audience for program

Review available material and secure additional materials if needed

Consult advisory committee and other community leaders in the preparation of specific program plans

Determine most effective learning strategies and experiences for subject and specific audiences

Prepare educational program units including demonstrations, lectures, discussion guides, and evaluation instruments

Plan for personnel, facilities, equipment and publicity

Communicate and coordinate plans with other staff

(2) Duty Area - Conduct Programs

Tasks - Conduct educational programs

Lead discussions

Evaluate programs

(3) Duty Area - Recruit, Train, and Utilize Lay Leaders

Tasks - Determine type and number of lay leaders needed

Develop job descriptions for volunteer positions

Consult advisory committee members or other key people in the community for nominations and assistance in recruiting leaders

Discuss with potential leaders what is expected of them and how they can contribute

Obtain commitment from leaders regarding time and resources they will provide

Identify or assist leaders in identifying training needs

Plan and conduct training sessions

Assign program responsibilities to lay leaders

Provide continuing support, training, and guidance to lay leaders

Provide appropriate recognition for lay leaders

Evaluate impact of lay leader program accomplishments

(4) Duty Area - Respond to Client Requests for Specific Information

This duty area had no tasks which met the criteria for inclusion in important task listing. However, the five respondent groups indicated that it was in the top four duty areas in overall criticality.

- b. Program Related - The five respondent groups indicated that the following duty areas are in the top seven in terms of relative criticality to the overall successful performance of the Extension 4-H and Youth Leader's role. They are: Prepare Annual Plan of Work; Develop and Maintain Public Relations; and Assess Community Needs. The duty areas of this category and the associated tasks that met the criteria are listed below.

(1) Duty Area - Assess Community Needs

Tasks - Recruit, select, and organize advisory committee members

Consult advisory committee and other community leaders in the assessment of community needs

Determine the priorities of needs

(2) Duty Area - Prepare Annual Plan of Work

Tasks - Review, up-date or prepare long-range plan

Select program topics

Consult advisory committee and other community leaders in preparation and review of plan of action

Consult volunteers about plans, time commitments, and resources

Coordinate plans with other local staff and supporting staff

(3) Duty Area - Evaluate Program Effectiveness

Tasks - Assess subsequent behavioral changes

Consult advisory committee or lay leaders in the evaluation process

(4) Duty Area - Develop and Maintain Public Relations

Tasks - Identify individuals and groups whose support is important to the Cooperative Extension Service

Develop and maintain working relationships and rapport with key individuals

Develop and maintain working relationships and rapport with mass media

Prepare publicity articles

(5) Duty Area - Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture

Tasks - Keep administration informed of results, problems, and progress

(6) Duty Area - Supervise Staff

Tasks - Identify staff needs and abilities

Make assignments and explain duties

Assist staff in program development and execution

Give feedback and recognition to staff

Coordinate work of staff

- c. Administrative - The two duty areas in this category were in the lower half of the duty areas in the overall relative criticality. The two professional groups did identify the following tasks which met the established criteria for inclusion in the important tasks list.

(1) Duty Area - Maintain and Increase Personal Professional Competencies

Tasks - Evaluate personal areas of strengths and weaknesses

Read relevant periodicals, publications

Participate in training conferences, workshops

(2) Duty Area - Perform Administrative Functions

Tasks - Participate in staff meetings

3. There is a set of tasks which the two professional groups indicated are not critical to the successful performance of the role of the Extension 4-H and Youth Leader. These tasks should be de-emphasized in any Extension 4-H and Youth Leader role definition. The criterion utilized to include tasks in the listing was that the tasks were the lowest in relative

criticality by both groups with a mean score of under 5.000. It should also be noted that 10 of the 13 following tasks were among the lowest in relative time spent by both professional groups.

a. Duty Area - Assess Community Needs

Tasks - Review demographic data about community

b. Duty Area - Prepare Annual Plan of Work

Tasks - Review prior narrative and statistical reports
Allocate person-days in each area

c. Duty Area - Conduct Programs

Tasks - Obtain insurance coverage for groups and clubs if necessary

d. Duty Area - Respond to Client Requests for Specific Information

Tasks - Keep records of requests and information given

e. Duty Area - Respond to Client Requests for Technical Assistance

Tasks - Visit location/client if necessary

Facilitate communication between client and specialist

Demonstrate procedures if necessary

Keep records of requests and assistance given

f. Duty Area - Report Activities, Impact, and Accomplishments

Tasks - Report statistical data on EMIS according to codes

This task met the criteria for inclusion in this group of de-emphasized tasks. However, it must be recognized that there is an administrative need to keep this as an

appropriate task in the role of the Extension 4-H
and Youth Leader

g. Duty Area - Perform Administrative Functions

Tasks - See that office equipment is maintained

Set up/maintain filing system

Serve on office committees

4. The duty area of Evaluate Program Effectiveness was not viewed as extremely important to the overall successful performance of the Extension 4-H and Youth Leader's position. However, evaluation was identified as important tasks in two other duty areas. This investigator would recommend that the importance of program evaluation methods and utilization be emphasized during in-service training programs of the Extension 4-H and Youth Leaders.

5. There appears to be a continuing need to emphasize to the Extension 4-H and Youth Leaders the importance of two tasks which must be considered extremely important to the successful operation of the Iowa CES. This recommendation is made as the analysis indicated that not all of the Extension 4-H and Youth Leaders are performing the following tasks.

a. Task - Participate in staff meetings. The Iowa CES places a team of professional educators in each county to conduct the informal Extension education program. All county-based staff members, including the Extension 4-H

and Youth Leaders, should be fully participating members of this team. This includes participating in staff conferences in order to provide the most effective educational program possible to the residents of each county.

- b. Task - Ensure that program operations are in compliance with affirmative action requirements. The laws of the United States, specifically those related to Title VI and Title VII of the Civil Rights Acts of 1964, must be recognized and adhered to by the Extension staff, including the Extension 4-H and Youth Leaders. Failure to comply could result in loss of substantial amounts of federal revenue, with the end result being the loss of many positions.

Section Three - Recommendations for Additional Research

There is a need to continue research in the general area of job analysis of Extension workers as a continuation of this investigation. Five additional areas of research are suggested.

1. There appears to be an interaction of several of the respondent characteristics and their perceptions of the duty areas as performed, relative time spent and relative criticality. The nature and strength of this interaction needs to be investigated.
2. This investigation has identified the tasks upon which to continue to the next step in the personnel selection validation process. The next step, as suggested by Menne, McCarthy,

and Menne, is the identification of the knowledge, skills, abilities, and other personal characteristics needed by professional staff members employed by the Iowa CES to perform the identified tasks.

3. This investigation showed that formal education had significant effect on the perceptions of the respondents regarding the duty areas performed, relative time spent and relative criticality of duty areas performed by Extension 4-H and Youth Leaders. The respondents are involved with and receive varying amounts of informal adult education during their tenure in the position identified in this study. A question of interest is: Does the increased adult education change the perceptions of the duty areas performed by the Extension 4-H and Youth Leader?
4. This study should be repeated to continue refinement of the role definition of the Extension 4-H and Youth Leader. However, any new investigation should be conducted at a time of the year other than the heavy 4-H program execution summer months.
5. A similar detailed job analysis should be conducted for each of the CES field positions. This could include the position of County Extension Directors, the Extension Home Economists and the Area Extension Specialists.

6. If there is a need to fully define the role of others involved in the field of adult education, the procedures used in this investigation could be utilized.
7. An individual self-concept as it relates to role fulfillment and the contribution it makes in the frequent turnover of professional Extension 4-H and Youth Leaders should be investigated.

SUMMARY

Extension 4-H and Youth Leaders are professionals employed to implement an informal educational 4-H and Youth program aimed at Iowa's 9 to 18 year old youth. The 4-H and Youth program is one of the four main educational components of the Cooperative Extension Service of Iowa State University.

Recently, there has been a need to replace annually 12 to 15 percent of the professional Extension 4-H and Youth Leaders. This continuing need to replace these professionals raised questions as to what qualifications should be sought as new staff members are recruited and selected. The qualifications needed to successfully perform a job must be specifically related to the job performed and be part of a valid personnel selection procedure.

A review of the literature showed that employers may choose from at least three validation strategies. Most employers are finding that the nonstatistical, content validation strategy is the only practical strategy to utilize. A key element in recently developed content validation procedures is the analysis of the job by those who are knowledgeable about the job. The analysis of the job should include:

1. Major duties actually performed
2. Critical nature of each duty performed
3. Degree of difficulty of each duty performed
4. Amount of time spent or frequency of performing the duty

5. Knowledge, skills, abilities and other characteristics which are important for job performance and not learned on the job.

The purpose of this study was to conduct a detailed analysis of the role of the single-county and two-county Extension 4-H and Youth Leader as performed in Iowa.

In view of the direct and continuing involvement with the 4-H program, five groups were identified as being knowledgeable about the role of the Extension 4-H and Youth Leader. The five groups are:

1. The Extension 4-H and Youth Leaders
2. The Area and State Administrators
3. County Agricultural Extension Council members
4. 4-H Expansion and Review Committee members (County 4-H Committee)
5. 4-H Club Organizational Leaders

Previous studies of the role of the Extension 4-H and Youth Leaders conducted in other states suggested four broad areas of responsibility as important to this position. These duties were:

1. Planning and evaluating the county 4-H program
2. Organizing and coordinating clubs
3. Providing information directly
4. Training local leaders

The data gathered from the five respondent groups were based on a questionnaire developed under the leadership of the American

Institute of Research (AIR). AIR is under contract to the Extension Service, United States Department of Agriculture to conduct a nation wide job analysis. Iowa is one of the eight cooperating pilot states in this project.

Two types of questionnaires were used in this study. The two professional staff groups completed parts one, two and three of the AIR-developed questionnaire, while the three lay volunteer groups completed a shorter adaptation of the AIR form. The two professional staff groups were asked to evaluate 125 tasks grouped into 14 duty areas in terms of:

1. Is the task performed?
2. Relative time spent on performed tasks
3. Relative criticality of performed tasks

The two professional groups and three lay volunteer groups were asked to evaluate the 14 duty areas in terms of:

1. Is duty area performed?
2. Relative time spent on duty area if performed
3. Relative criticality of duty area if performed
4. Relative difficulty of duty area if performed (rated only by the two professional groups)

A rating scale of one to nine with five as the midpoint was used for the relative time spent, relative criticality and relative difficulty analysis, while a two-point nominal scale was used to relate if the tasks and duty areas were performed. An analysis was made to

determine the relationships of the respondents' perception of the duty areas with six descriptive variables. The six descriptive variables are:

1. Position of respondent
2. Number of years in present position
3. Sex classification
4. Educational level completed by respondents
5. Type of geographical assignment of the professional Extension 4-H and Youth Leaders
6. Prior experience as a 4-H member

The AIR developed questionnaire was sent to 43 Extension 4-H and Youth Leaders and 21 Area and State Administrators employed by the CES during June, 1977. Four hundred seventy-three of the shorter questionnaires were sent in July, 1977, to a randomly selected sample of eight volunteers from each of the three lay volunteer groups from 20 randomly selected counties which employ one-county or two-county Extension 4-H and Youth Leaders. Usable returns from the various groups were as follows: Extension 4-H and Youth Leaders, 95.3%; Area and State Administrators, 100%; County Agricultural Extension Council members, 72.5%; 4-H Expansion and Review Committee members, 70.4%; 4-H Club Organizational Leaders, 66.8%.

The data were analyzed with four statistical procedures. The Chi-Square procedure was used to analyze the response to the question, "Is the task and duty area performed?". The students t test was

used to analyze response of the two professional groups as to the relative time spent, the relative criticality and the relative difficulty. The one way classification analysis of variance procedure, supplemented by the Duncan's test was used to analyze the responses related to the relative time spent and relative criticality of the duty areas.

Seven hypotheses were developed for this study. They were null hypotheses or statements of no differences. For each hypothesis the five percent level of significance was used in determining if the observed variation was accountable by other than chance. The null hypotheses were rejected if significant differences were noted for ten or more task statements, or for three or more duty areas.

The first three null hypotheses were related to the analysis of the 125 tasks by the two professional groups. The next four hypotheses were related to the analysis of the 14 duty areas. The perceptions of the three lay volunteer groups and the two professional staff groups were analyzed for hypotheses four, five and six. Only the perceptions of the two professional groups were analyzed for hypothesis seven.

Null hypothesis number one states: There is no significant difference between the Extension 4-H and Youth Leaders; and their Area and State Administrators' perceptions of the tasks within each duty performed by the Extension 4-H and Youth Leader.

This hypothesis was rejected as significant differences were noted for 13 of the task statements. In each of the 13 task statements,

greater numbers of the Area and State Administrators perceived the tasks being performed than did the Extension 4-H and Youth Leaders.

Fifty-three tasks in 11 duty areas were perceived as being performed by at least 90 percent of the Extension 4-H and Youth Leaders.

Null hypothesis number two states: There is no significant difference between the professional Extension 4-H and Youth Leaders' and their Area and State Administrators' perceptions of the relative amount of time spent by the Extension 4-H and Youth Leaders performing the tasks within each duty.

This null hypothesis was rejected as significant differences between the two professional groups were noted for 28 task statements. In each of the 28 task statements, the Area and State Administrators perceived the tasks as consuming significantly less time than did the Extension 4-H and Youth Leaders.

Twenty tasks were identified as consuming more than an average amount of time to perform. There was general agreement between the two professional groups for the six most time consuming tasks. The most time consuming tasks were associated with the duty areas of: Prepare Specific Program Plans; Conduct Programs; and Recruit, Train, and Utilize Lay Leaders.

Forty-four tasks were identified as consuming a low amount of time to perform. For each of these tasks, the Area and State Administrators perceived the task as consuming less relative time to perform. Nineteen of the tasks with significant differences were noted among these 44 low time consuming tasks.

Null hypothesis three states: There is no significant difference between the professional Extension 4-H and Youth Leaders' and their Area and State Administrators' perceptions of the relative criticality of tasks performed within each duty by the Extension 4-H and Youth Leaders.

This null hypothesis was rejected as significant differences were noted for 16 of the task statements. The Area and State Administrators generally perceived these 16 tasks as less critical than did the Extension 4-H and Youth Leaders.

Eighty-six tasks were identified by the Extension 4-H and Youth Leaders as above average in criticality while the Area and State Administrators identified only 66. There was general agreement between both groups on the six most critical tasks.

The Extension 4-H and Youth Leaders rated no tasks as low in criticality while the Area and State Administrators rated seven tasks low in criticality. The two professional groups generally agreed on the four lowest tasks in terms of relative criticality.

Null hypothesis number four states: There is no significant difference in perceptions of the duties performed by the Extension 4-H and Youth Leaders when classified by the selected characteristics of:

- a. Position of respondents
- b. Number of years in present position
- c. Sex classification
- d. Educational level completed by respondents
- e. Type of geographical assignment of the professional Extension 4-H and Youth Leaders
- f. Prior experience as a 4-H member

The null hypothesis was rejected for the respondent characteristics of: position of respondent, educational level completed by respondents, and the type of geographical assignment of the professional Extension 4-H and Youth Leaders.

When grouped by the various characteristics, the Area and State Administrators, the respondents with four or more years of service, the male respondents, the respondents with graduate degrees, the respondents with area and state assignments, and respondents with no prior experience as a 4-H member generally perceived more of the Extension 4-H and Youth Leaders performing the 14 duty areas than other respondent groupings.

Null hypothesis number five states: There is no significant difference in perceptions of the relative amount of time spent by the professional Extension 4-H and Youth Leaders accomplishing the duties performed when classified by the selected characteristics of:

- a. Position of respondents
- b. Number of years in present position
- c. Sex classification
- d. Educational level completed by respondents
- e. Type of geographical assignment of the professional Extension 4-H and Youth Leaders
- f. Prior experience as a 4-H member

The null hypothesis was rejected for the respondent characteristics of: position of respondent, number of years in present position, sex classification, educational level completed by respondents, and type of geographical assignment of the professional Extension 4-H and Youth Leaders.

The two professional groups, the respondents with four or more years of service, the male respondents, the respondents with graduate degrees,

the respondents with area or state assignments and those with prior experience as a 4-H member generally perceived the fourteen duty areas as less time consuming than the other respondent groupings.

Null hypothesis number six states: There is no significant difference in perceptions of the relative criticality of the duties performed by the Extension 4-H and Youth Leaders when classified by the selected characteristics of:

- a. Position of respondents
- b. Number of years in present position
- c. Sex classification
- d. Educational level completed by respondents
- e. Type of geographical assignment of the professional Extension 4-H and Youth Leaders
- f. Prior experience as a 4-H member

The null hypothesis was rejected for the respondent characteristics of: position of the respondent, number of years in present position, educational level completed by respondents, and type of geographical assignment of the professional Extension 4-H and Youth Leaders.

The members of the 4-H Expansion and Review Committee, the respondents with graduate degrees, the respondents with less than a full-time one county Extension 4-H and Youth Leader, and the respondents with prior experience as a 4-H member tended to perceive the 14 duty areas as less critical than any of the other respondent groupings.

Prior experience as a 4-H member did not contribute to any of the significant differences noted in perceptions in any of the three areas of analysis of the 14 duty areas.

Null hypothesis number seven states: There is no significant

difference between professional Extension 4-H and Youth Leaders' and their Area and State Administrators' perceptions of the relative difficulty of the duties performed by the Extension 4-H and Youth Leaders. There was insufficient evidence to reject this null hypothesis. There was general agreement between the two professional groups on the relative difficulty of the duty areas performed. There was no significant differences noted among any of the 14 duty areas.

The 14 duty areas and 125 associated tasks were grouped into three broad areas of program execution, program related and administrative.

From the data of this study, the program execution category must be considered the most important collection of duty areas as the four top duty areas in importance to the successful performance of the Extension 4-H and Youth Leader role fell into this category. Twenty-one tasks which met a set of established criteria were identified as extremely important to the role of the Extension 4-H and Youth Leader from the category of program execution.

The program related category had three duty areas in the top seven duty areas of relative criticality. Twenty-one additional tasks from the duty areas of this category met the criteria as extremely important to the role of the Extension 4-H and Youth Leader.

The administration category had two duty areas which added four additional tasks to the list of important tasks of the role of the Extension 4-H and Youth Leader.

In summation, the results of this study indicate that there is not agreement and understanding of the duties and tasks performed by the Extension 4-H and Youth Leaders employed by the Iowa State University CES. However, there is a set of duty areas and tasks which has been identified in this study as being extremely important to the successful performance of the role of the Extension 4-H and Youth Leader.

There is a need to develop among the professional and the volunteer groups that are continually and directly involved with the 4-H and Youth program a clearer understanding of the role of the Extension 4-H and Youth Leader. As this clearer understanding is developed, the relative high rate of turnover of professional Extension 4-H and Youth Leaders should be reduced.

BIBLIOGRAPHY

- American Psychological Association, Division of Industrial-Organizational Psychology. 1975. Principles for the validation and use of personnel selection procedures. The Industrial Organizational Psychologist, Dayton, Ohio. 19 pp.
- Ash, Philip, and Leonard P. Kroeker. 1975. Personnel selection, classification and placement. Annual Review of Psychology. 481-504.
- Bassford, Gerald L. 1974. Job testing-alternative to employment quotas. Business Horizons 17(1):37-50.
- Beavers, Irene, and Ruth L. Smith. 1973. Tasks of extension family food aides: a cluster analysis. Home Economics Research Journal 1(4):239-245.
- Beyer, William H. 1966. Handbook of tables for probability and statistics. The Chemical Rubber Co., Cleveland, Ohio. 362 pp.
- Blalock, Hubert M., Jr. 1972. Social statistics. McGraw-Hill Book Company, New York. 583 pp.
- Bray, Douglas W., and Joseph L. Moses. 1972. Personnel selection. Annual Review of Psychology 23:545-576.
- Brown, Ronald A., Danny L. Cheatham, Ann P. Thornhill, and Jimmy A. Bonner. 1976. A pilot project to determine competencies needed by extension 4-H and youth agents and to develop a curriculum to provide these competencies. Annual Report. Department of Agricultural and Extension Education, Mississippi State University, State College, Mississippi. 16 pp.
- Chapple, Eliot Dismore, and Leonard R. Sayles. 1961. The measure of management; designing organizations for human effectiveness. Macmillan, New York. 218 pp.
- Equal Employment Opportunity Commission. 1970. Personnel testing and equal employment opportunity. Equal Employment Opportunity Commission, Washington, D. C. 48 pp.
- Fincher, Cameron. 1975. Differential validity and test bias. Personnel Psychology 28(4):481-500.
- Fine, Sidney A. 1967. Guidelines for the design of new careers. The W. E. Upjohn Institute for Employment Research, Kalamazoo, Michigan. 23 pp.

- Fine, Sidney A., and Wretha W. Wiley. 1971. An introduction to functional job analysis. The W. E. Upjohn Institute for Employment Research, Kalamazoo, Michigan. 87 pp.
- Fleishman, Edwin and Alan R. Bass. 1974. Studies in personnel and industrial psychology. The Dorsey Press, Howard, Illinois. 623 pp.
- Fox, Karl A., and Krishna T. Kumar. 1966. Delineating functional economic areas. pages 13-55 in Research and education for regional and area development. Iowa State University Press, Ames, Iowa.
- Gery, Gloria J. 1974. Hiring minorities and women: the selection process. Personnel Journal 53(12):906-909.
- Glass, Gene V., and Julian C. Stanley. 1970. Statistical methods in education and psychology. Prentice-Hall, Inc., Englewood Cliffs, New Jersey. 546 pp.
- Gogen, Loren F. 1971. Youth agents job: critical components. Journal of Extension 9(2):16-23.
- Goodale, James G. 1976. Tailoring the selection interview to the job. Personnel Journal 55(2):62-65.
- Hampton, Leonard A. 1969. An analysis of critical behaviors of cooperative extension agents in the performance of their jobs. Ph.D. dissertation. North Carolina State University, Raleigh, North Carolina.
- Harrison, Elizabeth W. 1975. Home economist role as perceived by the extension home economist and by home economics program committee members. M. S. thesis. Iowa State University, Ames, Iowa.
- Iowa State University Cooperative Extension Service. 1976. Background of cooperative extension work in Iowa and provisions of the county agricultural extension law. Iowa State University Cooperative Extension Service, Bulletin I(CD)004R. 11 pp.
- Kemp, Phyllis E. 1967. Commitment and job satisfaction. Journal of Cooperative Extension 5(3):171-177.
- Kinsinger, Carol K. 1967. The role of the county home economics agent in Kansas. M. S. thesis. Kansas State University, Manhattan, Kansas.
- Knowles, Malcom S. 1970. The modern practice of adult education. Association Press, New York. 384 pp.

- Lawshe, C. H. 1975. A quantitative approach to content validity. *Personnel Psychology* 28(4):563-575.
- Lennon, Roger T. 1956. Assumptions underlying the use of content validity. *Educational and Psychological Measurement* 16:294-304.
- Lifer, Charles W. 1966. The role of the area extension agent, 4-H as perceived by county 4-H advisory committee members. M. S. thesis. The Ohio State University, Columbus, Ohio.
- Livy, Bryan M. 1975. Job evaluation: a critical review. Ruskin House, London, England. 192 pp.
- McCormick, Ernest J. 1959. Application of job analysis to indirect validity. *Personnel Psychology* 12(3):402-412.
- McCormick, Ernest J. and Angelo S. DeNisi. 1976. An alternative approach to test validation. *Personnel Administrator* 21(1):56-59.
- McCormick, Ernest J., Paul R. Jeanneret and Robert C. Mechom. 1972. A study of job characteristics and job dimensions as based on the position analysis questionnaire. *Journal of Applied Psychology* 56(4):347-368.
- Menne, John W., William McCarthy and Joy Menne. 1976. A systems approach to content validation of employee selection procedures. *Public Personnel Management* 5(6):387-396.
- Miller, Kenneth M., editor. 1975. Psychological testing in personnel assessment. John Wiley & Sons, New York.
- Moon, Peter and Paul B. Crooks. 1966. Improving agent selection. *Journal of Cooperative Extension* 10(4):229-232.
- Nie, Norman H., C. Harlan Hull, Jean G. Jenkins, Karen Steinbrenner and Dale H. Bent. 1975. Statistical package for the social sciences. McGraw-Hill Book Company, New York. 675 pp.
- Ottelman, Robert L. and J. Brad Chapman. 1977. Content validity: a quantitative methodology for validation. *Action* 13(4):8.
- Parsons, Jerry and John Kiesow. 1975. The 4-H program assistant's role. *Journal of Extension* 33(4):11-18.
- Pettys, R. A. 1970. Some factors influencing the length of tenure of county extension agents, 4-H in Ohio. M. S. thesis, The Ohio State University, Columbus, Ohio.

- Prien, E. P. and W. W. Ronan. 1971. Job analysis: a review of research findings. *Personnel Psychology* 24(3):371-396.
- Robertson, David E. 1975. Employment testing and discrimination. *Personnel Journal* 54(1):18-21.
- Robinson, Russell D. 1963. Perceptions of the county 4-H club agents' role in Wisconsin. Ph.D. dissertation. University of Wisconsin, Madison, Wisconsin.
- Robinson, Russell D. 1964. Examining the role of agents in 4-H. *Journal of Cooperative Extension* 2(2):105-112.
- Rouleau, Eugene J. and Burton F. Krain. 1975. Using job analysis to design selection procedures. *Public Personnel Management* 4(5):300-304.
- Rowe, G. A. 1970. Studies related to Missouri youth agents and former youth agent positions. Extension Education Department, University of Missouri, Columbia, Missouri. Training and Staff Development Special Report 18. 7 pp.
- Sabrosky, L. K. 1958. Some factors affecting the tenure of 4-H club agents in Wisconsin. U. S. Federal Extension Service, ER&T-228(11-58), Washington, D. C. 3 pp.
- Sharf, James C. 1975. How validated testing eases the pressures of minority recruitment. *Personnel* 52(3):53-59.
- Spencer, Hollister. 1974. Task definition and exposition: the catalyst in the matching process. *Personnel Journal* 53(6):428-434.
- U. S. Congress. 1964. 88th, HR 7152. Civil Rights Act of 1964 Public Law. 88-352.
- United States Department of Labor, Manpower Administration. 1972. Handbook for analyzing jobs. United States Department of Labor, Washington, D. C.
- United States Civil Service Commission. 1976. Testing and standards instructions. Federal personnel (Manual supplement; appendices to supplements 271-1, 271-2, 335-1 and 990-1 (Book 3) Part 900, Subpart F. U. S. Civil Service Commission, Washington, D. C.
- Walden, Bobbie L. 1975. Recruitment and retention of the adult learner. Division of Instruction, Alabama State Department of Education, Montgomery, Alabama. 42 pp.

Walsh, Richard J. and Lee R. Hess. 1974. The small company, EEOC, and test validation alternatives: Do you know your options? Personnel Journal 53(11):840-845.

Whaples, G. C. 1965. Major duties and responsibilities of the county club agent in Kansas. University Extension Education Department Kansas State University, Manhattan, Kansas. 9 pp.

Wilkening, Eugene A. 1957. County extension agents in Wisconsin--perceptions of role definitions as viewed by agents. University of Wisconsin Research Bulletin 203, Madison, Wisconsin.

Worden, Phyllis. 1975. The extension job: Who stays - - Who goes? Journal of Extension 13(3):3-10.

ACKNOWLEDGEMENTS

This investigator is indebted to a number of individuals who have made the completion of this study possible.

Special thanks goes to Dr. Roger Lawrence as major professor for his guidance and counseling throughout my entire graduate program. Sincere appreciation goes to all members of my graduate committee, Dr. Ray Bryan, committee chairman, Dr. Irene Beavers, Dr. Lawrence, Dr. Charles Mulford, Dr. Anthony Netusil and Dr. Clifford Smith, for their support, patience and assistance throughout this study.

My gratitude goes to Dr. Netusil and Dr. Rex Thomas for the statistical analysis and computer assistance.

The group who has given so much and received so little in return is my three family members--my wife Doris, and our children, Deborah and Dennis. The greatest words of appreciation and debts of gratitude must be given to Doris for her continued encouragement, support and hours of assistance provided throughout the graduate degree program and the completion of this study.

Sincere appreciation is also expressed to Kathleen Shaver for her many hours of patience in editorial work and for the typing during the final stages of this investigation.

Appreciation is expressed to the Iowa Cooperative Extension Service professional staff and the lay volunteer leaders throughout Iowa who responded in a very positive way.

This study is dedicated to my family with the hope that the findings will be of significant value and use by my employer, the Cooperative Extension Service of Iowa State University.

APPENDIX A. AIR JOB ANALYSIS QUESTIONNAIRE SENT TO TWO PROFESSIONAL
GROUPS

JOB ANALYSIS QUESTIONNAIRE FOR COUNTY EXTENSION AGENTS WORKING IN

Agriculture

4-H/Youth Development

Home Economics/Family Living

Prepared by the American Institutes for Research under contract number 12-05-300-372
for the Cooperative Extension Service of the U.S. Department of Agriculture, May 1977



INTRODUCTION

County extension agents having responsibility for program activities in agriculture, 4-H and youth development, and home economics and family living in your state and seven other cooperating states are being asked to participate in the job analysis phase of a 25-month project. The objectives of the project are to develop (1) valid selection instruments and procedures for entry-level agents and (2) performance evaluation instruments and procedures for agents at all levels. The instruments and procedures developed during the project will be made available to the Cooperative Extension Services of the fifty states for use at their discretion.

This questionnaire contains three parts. Part I is concerned with background information. One standard questionnaire format is being used for all agents in all states. The information from this section will be used to compare the data from the remaining two parts in terms of the background variables to determine similarities and differences between and among position classes and the eight states.

Part II is concerned with the job duties and job tasks carried out by the agents in their present jobs. The duties and tasks included in the questionnaire are based upon data collected previously during field visits by the AIR staff to each of the eight participating states.

Part III is concerned with the knowledge, skills, abilities, and other characteristics (KSAO's) of agents which may be necessary to do a satisfactory job as a county extension agent. The KSAO's are also based on data obtained during the field visits.

Instructions for completing each section appear immediately before each section. Completing the questionnaire in accordance with these instructions will help insure that a standard frame of reference is used by all agents in completing each section. Your cooperation in promptly completing and returning the questionnaire will facilitate the development of instruments and procedures based on a comprehensive sample of agents representative of all eight cooperating states.

INSTRUCTIONS FOR COMPLETING PART I

Please complete the items requested that are applicable to your present job. Your name is requested so that the project staff may monitor the returns of the questionnaires. Results will be released only in aggregate form without individual identification.

☐ Other extension agents ⁽³⁾
☐ Program assistants ⁽⁴⁾
☐ Program aides ⁽⁵⁾
☐ Secretaries ⁽⁶⁾
☐ Other (please specify) ⁽⁷⁾ _____

INSTRUCTIONS FOR COMPLETING SECTION A-PART II

Section A contains a list of job tasks grouped into 14 duty areas. You are to complete three steps, in order, in filling out Section A. Complete each step as it applies to your present job in your present location.

- STEP 1: Read through the entire list of job tasks on pages 5 through 11. If you perform the task listed, place a ✓ in Column 1 after the task. If you do not personally perform the task listed, even though you may see to it that others do, leave Column 1 blank. Do this now for all tasks before going on to the instructions for Step 2.
- STEP 2: Complete this step only for those tasks you checked in Column 1. Use Column 2 to rate the relative amount of time spent on each task. Relative amount of time spent means the total amount of time you spend doing the task compared with the amount of time you spend on all other tasks you checked. In making this rating, develop a frame of reference by scanning the entire list of tasks, not just those in a single duty. Pick out one of the tasks on which you spend the most time. Use this as a benchmark for the 9 on the rating scale. Then pick out one of the tasks on which you spend the least amount of time. Use this as a benchmark for the 1 on the scale. Using these as reference points, rate all of the tasks you perform. Try to use the entire nine-point range in rating the tasks. For your convenience, the scale appears at the top of each page of Section A. Complete the RELATIVE AMOUNT OF TIME SPENT ratings in Column 2 for all tasks you perform before going on to the instructions for Step 3.
- STEP 3: Complete this step only for those tasks you checked in Column 1. Use Column 3 to rate the relative criticality of each task. Relative criticality means your judgment of the relative importance of performing the task competently in order to do your total job satisfactorily. Again, develop a frame of reference by scanning the entire list of tasks. Pick out one of the tasks which you feel is most important to your total job. Use this as a benchmark for the 9 on the scale. Then pick out one of the tasks which you feel is least important to your total job and use it as a benchmark for the 1 on the scale. Using these as reference points, rate all of the tasks you perform trying to use the entire nine-point range in judging the relative importance of the tasks. Complete the RELATIVE CRITICALITY ratings in Column 3 for all tasks you perform before going on to Section B.

Use this scale for rating columns 2 and 3: 1 = Extremely low 4 = ²⁰⁰ Below average 7 = High 2 = Very low 5 = Average 8 = Very high 3 = Low 6 = Above average 9 = Extremely high				Check (✓) if you per- form task	Relative amount of time spent	Relative criticality
				1	2	3
DUTY 1 - ASSESS COMMUNITY NEEDS						
1. Recruit, select, and organize advisory committee members.						
2. Review demographic data about community.						
3. Assess community resources, facilities, and services.						
4. Review past program interest and results, including requests for assistance.						
5. Consult advisory committee and other community leaders in the assessment of community needs.						
6. Solicit and assess views of public concerning community needs.						
7. Determine priorities of needs.						
8. Educate community on needs and priorities.						
9. Prepare a county situational statement or assessment survey in all program areas.						
DUTY 2 - PREPARE ANNUAL PLAN OF WORK						
1. Review prior narrative and statistical reports.						
2. Review, up-date, or prepare long range plan.						
3. Determine annual and long-term objectives in each area.						
4. Select program topics.						
5. Select teaching methods.						
6. Consult advisory committee and other community leaders in preparation and review of plan of action.						
7. Consult volunteers about plans, time commitments, and resources.						
8. Coordinate plans with other local staff and supporting staff.						
9. Allocate person-days in each area.						
10. Schedule programs on calendar.						
11. Determine how effectiveness will be evaluated.						
12. Code plan according to EMIS codes.						

<div style="text-align: center;">201</div> <div>Use this scale for rating columns 2 and 3:</div> <div> 1 = Extremely low 4 = Below average 7 = High 2 = Very low 5 = Average 8 = Very high 3 = Low 6 = Above average 9 = Extremely high </div>			Check (✓) if you perform task	Relative amount of time spent	Relative difficulty
			1	2	3
DUTY 3 - PREPARE SPECIFIC PROGRAM PLANS					
1. Determine objectives and audience for program.					
2. Review available material and secure additional materials if needed.					
3. Consult advisory committee and other community leaders in the preparation of specific program plans.					
4. Identify resource personnel and assign responsibilities.					
5. Determine most effective learning strategies and experiences for subject and specific audiences.					
6. Set schedule.					
7. Plan material to be covered.					
8. Prepare educational program units including demonstrations, lectures, discussion guides, and evaluation instruments.					
9. Plan for personnel, facilities, equipment and publicity.					
10. Estimate dollar and time costs to implement specific programs.					
11. Ensure that programs will be in compliance with relevant policies and regulations.					
12. Plan program evaluation.					
13. Communicate and coordinate plans with other staff.					
DUTY 4 - CONDUCT PROGRAMS					
NOTE: Check only the tasks you do yourself. Duty 7 concerns what you do in support of lay leaders who may perform some of the tasks in this duty.					
1. Prepare and issue announcements.					
2. Enroll participants.					
3. Solicit funds from donors for programs as necessary.					
4. Obtain speakers, materials, equipment, handouts.					
5. Obtain insurance coverage for groups and clubs if necessary.					
6. See that facilities are ready for program.					
7. Conduct educational programs.					

Use this scale for rating columns 2 and 3:	1 - Extremely low	4 - ²⁰² Below average	7 - High	Check (✓) if you feel form task	Relative amount of time spent	Relative efficiency
	2 - Very low	5 - Average	6 - Very high			
3 - Low	6 - Above average	9 - Extremely high				
DUTY 4 - CONDUCT PROGRAMS (continued)						
8. Lead discussions.						
9. Conduct follow-ups.						
10. Evaluate programs.						
DUTY 5 - RESPOND TO CLIENT REQUESTS FOR SPECIFIC INFORMATION						
1. Question client to determine full nature of the problem.						
2. Answer client's request directly with specific information.						
3. Refer client to source of information.						
4. Use available sources to obtain answer when not already known to give client.						
5. Keep records of requests and information given.						
6. Determine whether significance or frequency of question merits special program or activity.						
DUTY 6 - RESPOND TO CLIENT REQUESTS FOR TECHNICAL ASSISTANCE						
1. Question client to determine full nature of the problem.						
2. Visit location/client if necessary.						
3. Consult source material, specialist if necessary.						
4. Evaluate implications of possible alternatives with respect to client's situation (e.g., physical, financial, crop, etc.)						
5. Suggest alternatives to client.						
6. Facilitate communication between client and specialist.						
7. Demonstrate procedures if necessary.						
8. Keep records of requests and assistance given.						
9. Follow up results and evaluate impact of assistance given.						

Use this scale for rating columns 2 and 3:

- | | | |
|-------------------|-------------------|--------------------|
| 1 = Extremely low | 4 = Below average | 7 = High |
| 2 = Very low | 5 = Average | 8 = Very high |
| 3 = Low | 6 = Above average | 9 = Extremely high |

Check (✓) if you per- form task	Relative amount of time spent	Relative criticality
1	2	3

DUTY 7 - RECRUIT, TRAIN, AND UTILIZE LAY LEADERS

NOTE: Check only the tasks you do yourself whether or not you are assisted by advisory committee members or other lay leaders.

- | | | | |
|--|--|--|--|
| 1. Determine type and number of lay leaders needed. | | | |
| 2. Develop job descriptions for volunteer positions. | | | |
| 3. Consult advisory committee members or other key people in the community for nominations and assistance in recruiting leaders. | | | |
| 4. Discuss with potential leaders what is expected of them and how they can contribute. | | | |
| 5. Obtain commitment from leaders regarding time and resources they will provide. | | | |
| 6. Identify or assist leaders in identifying training needs. | | | |
| 7. Plan and conduct training sessions. | | | |
| 8. Assign program responsibilities to lay leaders. | | | |
| 9. Provide continuing support, training, and guidance to lay leaders. | | | |
| 10. Provide appropriate recognition for lay leaders. | | | |
| 11. Evaluate performance of lay leaders in carrying out programs. | | | |
| 12. Evaluate impact of lay leader program accomplishments. | | | |

DUTY 8 - EVALUATE PROGRAM EFFECTIVENESS

- | | | | |
|---|--|--|--|
| 1. Make follow-up visits if appropriate. | | | |
| 2. Obtain quantity and quality measures. | | | |
| 3. Assess interest of other groups for repeat of program or follow-on. | | | |
| 4. Compare results with stated goals. | | | |
| 5. Assess subsequent behavioral changes. | | | |
| 6. Consult advisory committee or lay leaders in the evaluation process. | | | |

Use this scale for rating columns 2 and 3:			1 - Extremely low 2 - Very low 3 - Low	4 - Below average 5 - Average 6 - Above average	7 - High 8 - Very high 9 - Extremely high	Check (✓) if you per- form task	Rate amount of time spent	Rate critically
			1	2	3			
DUTY 9 - REPORT ACTIVITIES, IMPACT, AND ACCOMPLISHMENTS								
1. Assemble data to be included in report.								
2. Evaluate usefulness of data for purpose intended.								
3. Report objectives, procedures, outcomes.								
4. Report statistical data on EMIS according to codes.								
5. Disseminate reports to appropriate persons and groups.								
DUTY 10 - DEVELOP AND MAINTAIN PUBLIC RELATIONS								
1. Identify individuals and groups whose support is important to the Cooperative Extension Service.								
2. Participate in meetings of relevant groups.								
3. Develop and maintain working relationships and rapport with key individuals.								
4. Develop and maintain working relationships and rapport with mass media.								
5. Prepare publicity articles.								
6. Appear on radio and/or TV presentations.								
7. Develop, maintain, and up-date lists for dissemination of information.								
8. Make visits to promote CES programs.								
DUTY 11 - DEVELOP AND MAINTAIN STAFF RELATIONSHIPS WITHIN THE EXTENSION SERVICE, THE UNIVERSITY, AND THE STATE AND FEDERAL DEPARTMENTS OF AGRICULTURE								
1. Provide information requested.								
2. Serve on committees.								
3. Respond to requests from other counties.								
4. Share information with other agents and with university personnel.								
5. Coordinate programs through appropriate channels with other jurisdictions.								

<div> <div>205</div> <div> Use this scale for rating columns 2 and 3: </div> </div> <div> 1 = Extremely low 2 = Very low 3 = Low </div> <div> 4 = Below average 5 = Average 6 = Above average </div> <div> 7 = High 8 = Very high 9 = Extremely high </div>				Check (✓) if you per- form task	Relative amount of time spent	Relative critically
1	2	3				
DUTY 11 - DEVELOP AND MAINTAIN STAFF RELATIONSHIPS WITHIN THE EXTENSION SERVICE, THE UNIVERSITY, AND THE STATE AND FEDERAL DEPARTMENTS OF AGRICULTURE (continued)						
6. Keep administration informed of results, problems, and progress.						
7. Learn roles of ES, University, and Department of Agriculture and use their services.						
8. Cooperate with other county, State and Federal agencies and organizations.						
DUTY 12 - MAINTAIN AND INCREASE PERSONAL PROFESSIONAL COMPETENCIES						
1. Evaluate personal areas of strengths and weaknesses.						
2. Develop long-range plan for professional growth.						
3. Read relevant periodicals, publications.						
4. Participate in training conferences, workshops.						
5. Participate in professional organizations and meetings.						
6. Take formal education courses.						
7. Learn how to use equipment needed for programs.						
DUTY 13 - PERFORM ADMINISTRATIVE FUNCTIONS						
NOTE: Check only those tasks you do yourself. Do not check tasks you delegate to someone else even if you are responsible for seeing to it that they are done.						
1. Complete administrative reports and vouchers.						
2. Participate in staff meetings.						
3. See that office equipment is maintained.						
4. Set up/maintain filing system.						
5. Represent program areas in administrative decisions.						
6. Order supplies.						

Use this scale for
rating columns 2 and 3:

1 = Extremely low
2 = Very low
3 = Low

206

4 = Below average
5 = Average
6 = Above average

7 = High
8 = Very high
9 = Extremely high

Check (✓)
if you per-
form task

Relative
amount of
time spent

Relative
frequency

DUTY 13 - PERFORM ADMINISTRATIVE FUNCTIONS (continued)

7. Ensure that program operations are in compliance with affirmative action requirements.
8. Ensure that County Extension office is in compliance with EEO requirements.
9. Provide information for budget preparation.
10. Prepare and get approval for budget for county program.
11. Serve on office committees.
12. Participate in staff performance appraisal activities.
13. Participate in recruiting, hiring, and training activities.

DUTY 14 - SUPERVISE STAFF

1. Identify staff needs and abilities.
2. Make assignments and explain duties.
3. Assist staff in program development and execution.
4. Monitor staff performance.
5. Give feedback and recognition to staff.
6. Coordinate work of staff.
7. Formally evaluate appropriate staff.

Go back to page 4, read the instructions for Step 2, and proceed in accordance with the instructions.

Go back to page 4, read the instructions for Step 3, and proceed in accordance with the instructions.

INSTRUCTIONS FOR COMPLETING SECTION B-PART II

- STEP 4: Now that you have completed ratings on the basis of the individual job tasks, repeat Steps 1 through 3 in terms of the duty areas as a whole which appear on page 13. In making the duty ratings, consider the duty as being defined by those tasks within the duty area which you checked. If you did not check any of the job tasks within a duty area, do not rate the duty.
- STEP 5: Complete this step only for the duties you checked in Column 1. Use Column 4 to rate the relative difficulty of each duty area. Relative difficulty means your judgment of how hard it is for you to achieve the objectives of the duty due to one or more of the following: (1) the knowledge, skills, and abilities required; (2) the resources normally available to you for accomplishing the duty; or (3) situational characteristics of the environments in which you must carry out the duty. Pick out a duty for which you find the achievement of the objectives the hardest to accomplish. Use this as a benchmark for the 9 on the scale. Then pick out a duty for which you find the achievement of the objectives the easiest to accomplish, and use this as a benchmark for the 1 on the scale. Using these as reference points, rate all of the duties you perform trying to use the entire nine-point range in rating the relative difficulty of all duties.

Space has been provided on page 14 for you to write in any duties and/or job tasks which you feel are important but did not appear on the lists. You need not rate these duties or tasks since there will be no common base for comparison across all questionnaires for such write-ins.

After completing Section B of Part II, go on to the instructions for Part III.

ADDITIONAL DUTIES AND/OR JOB TASKS

Use this page to write in any duties and/or job tasks which you feel are an important part of your job but which did not appear on the duty and task lists.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

APPENDIX B. JOB ANALYSIS QUESTIONNAIRE USED WITH VOLUNTEER RESPONDENT
GROUPS

JOB ANALYSIS QUESTIONNAIRE
for
PROFESSIONAL EXTENSION 4-H AND YOUTH LEADERS
employed by
COOPERATIVE EXTENSION SERVICE
IOWA STATE UNIVERSITY
AMES, IOWA
and the
COUNTY AGRICULTURAL EXTENSION DISTRICTS

Prepared by
Donald H. Goering
Assistant to the Director
Personnel
109 Curtiss Hall
Iowa State University
Ames, Iowa 50011

INTRODUCTION

213

Your role, as an on-the-scene volunteer working with the 4-H programs out in the counties of Iowa, makes you an extremely important person to the Cooperative Extension Service. Because you are a 4-H leader, youth committee member or an extension council member, we feel you have first hand knowledge that can be of great value to us.

At the present time the Iowa Cooperative Extension Service is involved in an indepth study of the professional Extension 4-H and Youth Leader positions throughout the state. WE NEED YOUR HELP as we try to improve our selection criteria as we evaluate future candidates for the job of Extension 4-H and Youth Leader.

The questionnaire attached is divided into two parts. Part I, the longest of the two, is concerned with the broad duty areas carried out by the professional Extension 4-H and Youth Leaders in their present jobs. The list of duties, included in Part I, is based on Extension workers' jobs throughout the United States. You may find some which you feel are inappropriate for Iowa.

Part II is only one page in length and consists of a check mark answer sheet. It is concerned with background information about you. We ask for this information in the event we need to compare data from Part I with Part II.

Instructions for completing each section appear before that section. Completing the questionnaire using the instructions as written will help ensure that everyone filling out the form will use the same standard frame of reference. Your cooperation in promptly completing and returning the questionnaire by July 22, 1977, will help with the development of improved personnel selection criteria for the Cooperative Extension Service. Note the date of JULY 22nd; We tried to have this be due before the "ever busy County Fair time that we know volunteers are heavily involved in".

Since we want your honest opinion and reaction, your identification number will be clipped from this page when we receive it back in my office. You may be assured that your responses will be kept confidential and anonymous. The information from the completed returns will be released only as a whole, or total, without any individual identification shown.

INTRODUCTION

213

Your role, as an on-the-scene volunteer working with the 4-H programs out in the counties of Iowa, makes you an extremely important person to the Cooperative Extension Service. Because you are a 4-H leader, youth committee member or an extension council member, we feel you have first hand knowledge that can be of great value to us.

At the present time the Iowa Cooperative Extension Service is involved in an indepth study of the professional Extension 4-H and Youth Leader positions throughout the state. WE NEED YOUR HELP as we try to improve our selection criteria as we evaluate future candidates for the job of Extension 4-H and Youth Leader.

The questionnaire attached is divided into two parts. Part I, the longest of the two, is concerned with the broad duty areas carried out by the professional Extension 4-H and Youth Leaders in their present jobs. The list of duties, included in Part I, is based on Extension workers' jobs throughout the United States. You may find some which you feel are inappropriate for Iowa.

Part II is only one page in length and consists of a check mark answer sheet. It is concerned with background information about you. We ask for this information in the event we need to compare data from Part I with Part II.

Instructions for completing each section appear before that section. Completing the questionnaire using the instructions as written will help ensure that everyone filling out the form will use the same standard frame of reference. Your cooperation in promptly completing and returning the questionnaire by July 22, 1977, will help with the development of improved personnel selection criteria for the Cooperative Extension Service. Note the date of JULY 22nd! We tried to have this be due before the "ever busy County Fair time that we know volunteers are heavily involved in".

Since we want your honest opinion and reaction, your identification number will be clipped from this page when we receive it back in my office. You may be assured that your responses will be kept confidential and anonymous. The information from the completed returns will be released only as a whole, or total, without any individual identification shown.

Part I contains a list of fourteen broad duty areas which could be used to describe the role of the professional Extension 4-H and Youth Leader. You are to complete the steps, in order, in filling out Part I. Complete each step as it applies to your understanding of the role of the professional Extension 4-H and Youth Leader in your county in Iowa.

Step 1: Read through the entire list of broad duty areas on page 3.

These duty areas are further defined on pages 4 through 6. Please refer to them for an understanding of the individual job tasks which could be included in each broad duty area. Then, place a check mark in column 1, page 3, after each broad duty area you expect the professional Extension 4-H and Youth Leader to perform in your county. In the following steps you will be rating the broad duty areas you checked in this step.

Step 2: In this step you will work only with those items you checked in step 1, column 1. Use column 2 to rate the relative amount of time you expect the professional Extension 4-H and Youth Leader to spend on each broad duty area. Relative amount of time spent means the total amount of time you expect the Extension 4-H and Youth Leader to spend doing the broad duty area compared with the amount of time you expect him/her to spend on all the other broad duty areas you checked.

In making this rating develop a frame of reference by scanning the entire list of job duties. Pick out one of the duties you checked on which you expect the 4-H and Youth Leader to spend the most time. Use this as a measure for the #9 on the rating scale. Then pick out one of the duties you checked on which you expect the Extension 4-H and Youth Leader to spend the least amount of time. Use this as a measure for the #1 on the scale. Using these job duties as reference points, rate all of the job duties you have checked in step 1, column 1. Try to use the entire nine point range in rating the various duties you have checked. You may use the same number in the scale as many times as you wish. For your convenience, the scale appears at the top of page 3. Complete the RELATIVE AMOUNT OF TIME SPENT ratings in column 2 for all job duties you expect to be performed before going on to step 3.

Step 3: Complete this step only for those duty areas you checked in the first step. Use column 3 to rate the relative criticality of each duty. Relative criticality means your judgment of the relative importance of performing the duty areas competently in order that the Extension 4-H and Youth Leader is doing the duties as you expect them to be performed, totally satisfactorily.

Follow the same procedure as in step 2, first picking out the duties for the #9 and #1 ratings, respectively. Using these as reference points, rate the other items you have checked in column 1. Complete the RELATIVE CRITICALITY ratings in column 3 before going on to step 4.

Step 4: Space is provided at the bottom of page 3 for you to write in any duty areas (or specific job tasks) which you feel are important for the professional Extension 4-H and Youth Leader to perform, but did not appear on any of the lists. You will not need to rate these duties since there will be no common base across all the questionnaire respondents for such write-ins. After you have completed listing additional duties (or tasks), go on to the instructions for Part II on page 7.

PART I

215

Use this scale for rating columns 2, 3,

1 = Extremely low
2 = Very low
3 = Low

4 = Below average
5 = Average
6 = Above average

7 = High
8 = Very high
9 = Extremely high

Check (✓) if perform duty	Relative amount of time spent	Relative criticality
1	2	3

LIST OF BROAD DUTY AREAS

- | | | | |
|---|--|--|--|
| 1. Assess Community Needs | | | |
| 2. Prepare Annual Plan of Work | | | |
| 3. Prepare Specific Program Plans | | | |
| 4. Conduct Programs | | | |
| 5. Respond to Client Requests for Specific Information | | | |
| 6. Respond to Client Requests for Technical Assistance | | | |
| 7. Recruit, Train, and Utilize Lay Leaders | | | |
| 8. Evaluate Program Effectiveness | | | |
| 9. Report Activities, Impact, and Accomplishments | | | |
| 10. Develop and Maintain Public Relations | | | |
| 11. Develop and Maintain Staff Relationships within the Extension Service, the University, and the State and Federal Departments of Agriculture | | | |
| 12. Maintain and Increase Personal Professional Competencies | | | |
| 13. Perform Administrative Functions | | | |
| 14. Supervise Staff | | | |

ADDITIONAL DUTIES AND/OR JOB TASKS

216
JOB TASKS WHICH COULD DEFINE THE BROAD DUTY AREAS

Duty 1 - ASSESS COMMUNITY NEEDS

This duty could include the following job tasks: Recruit, select, and organize advisory committee members; Review demographic data about community; Assess community resources, facilities, and services; Review past program interest and results, including requests for assistance; Consult advisory committee and other community leaders in the assessment of community needs; Solicit and assess views of public concerning community needs; Determine priorities of needs; Educate community on needs and priorities; Prepare a county situational statement or assessment survey in all program areas.

Duty 2 - PREPARE ANNUAL PLAN OF WORK

This duty could include the following job tasks: Review prior narrative and statistical reports; Review, up-date, or prepare long range plan; Determine annual and long-term objectives in each area; Select program topics; Select teaching methods; Consult advisory committee and other community leaders in preparation and review of plan of action; Consult volunteers about plans, time commitments, and resources; Coordinate plans with other local staff and supporting staff; Allocate person-days in each area; Schedule programs on calendar; Determine how effectiveness will be evaluated; Code annual plan of work according to required computerized Extension Management Information System.

Duty 3 - PREPARE SPECIFIC PROGRAM PLANS

This duty could include the following job tasks: Determine objectives and audience for program; Review available material and secure additional materials if needed; Consult advisory committee and other community leaders in the preparation of specific program plans; Identify resource personnel and assign responsibilities; Determine most effective learning strategies and experiences for subject and specific audiences; Set schedule; Plan material to be covered; Prepare educational program units including demonstrations, lectures, discussion guides, and evaluation instruments; Plan for personnel, facilities, equipment and publicity; Estimate dollar and time costs to implement specific programs; Ensure that programs will be in compliance with relevant policies and regulations; Plan program evaluation; Communicate and coordinate plans with other staff.

Duty 4 - CONDUCT PROGRAMS

This duty could include the following job tasks: Prepare and issue announcements; Enroll participants; Solicit funds from donors for programs as necessary; Obtain speakers, materials, equipment, handouts; Obtain insurance coverage for groups and clubs if necessary; See that facilities are ready for program; Conduct educational programs; Lead discussions; Conduct follow-ups; Evaluate programs.

Duty 5 - RESPOND TO CLIENT REQUESTS FOR SPECIFIC INFORMATION

This duty could include the following job tasks: Question client to determine full nature of the problem; Answer client's request directly with specific information; Refer client to source of information; Use available sources to obtain answer when not already known to give client; Keep records of requests and information given; Determine whether significance or frequency of question merits special program or activity.

Duty 6 - RESPOND TO CLIENT REQUESTS FOR TECHNICAL ASSISTANCE

This duty could include the following job tasks: Question client to determine full nature of the problem; Visit location/client if necessary; Consult source material, specialist if necessary; Evaluate implications of possible alternatives with respect to client's situation (e. g., physical, financial, crop, etc.); Suggest alternatives to client; Facilitate communication between client and specialist; Demonstrate procedures if necessary; Keep records of requests and assistance given; Follow up results and evaluate impact of assistance given.

Duty 7 - RECRUIT, TRAIN, AND UTILIZE LAY LEADERS

This duty could include the following job tasks: Determine type and number of lay leaders needed; Develop job description for volunteer positions; Consult advisory committee members or other key people in the community for nominations and assistance in recruiting leaders; Discuss with potential leaders what is expected of them and how they can contribute; Obtain commitment from leaders regarding time and resources they will provide; Identify or assist leaders in identifying training needs; Plan and conduct training sessions; Assign program responsibilities to lay leaders; Provide continuing support, training, and guidance to lay leaders; Provide appropriate recognition for lay leaders; Evaluate performance of lay leaders in carrying out programs; Evaluate impact of lay leader program accomplishments.

Duty 8 - EVALUATE PROGRAM EFFECTIVENESS

This duty could include the following job tasks: Make follow-up visits if appropriate; Obtain quantity and quality measures; Assess interest of other groups for repeat of program or follow-up; Compare results with stated goals; Assess subsequent behavioral changes; Consult advisory committee or lay leaders in the evaluation process.

Duty 9 - REPORT ACTIVITIES, IMPACT, AND ACCOMPLISHMENTS

This duty could include the following job tasks: Assemble data to be included in report; Evaluate usefulness of data for purpose intended; Report objectives, procedures, outcomes; Report statistical data on required computerized reporting system according to appropriate codes; Disseminate reports to appropriate persons and groups.

Duty 10 - DEVELOP AND MAINTAIN PUBLIC RELATIONS

This duty could include the following job tasks: Identify individuals and groups whose support is important to the Cooperative Extension Service; Participate in meetings of relevant groups; Develop and maintain working relationships and rapport with key individuals; Develop and maintain working relationships and rapport with mass media; Prepare publicity articles; Appear on radio and/or TV presentations; Develop, maintain, and up-date lists for dissemination of information; Make visits to promote Cooperative Extension Service programs.

Duty 11 - DEVELOP AND MAINTAIN STAFF RELATIONSHIPS WITHIN THE EXTENSION SERVICE, THE UNIVERSITY, AND THE STATE AND FEDERAL DEPARTMENTS OF AGRICULTURE

This duty could include the following job tasks: Provide information requested; Serve on committees; Respond to requests from other counties; Share information with other agents and with university personnel; Coordinate programs through appropriate channels with other jurisdictions; Keep administration informed of results, problems, and programs; Learn roles of Extension Service, Iowa State University, United States Dept. of Agriculture, and use their services; Cooperate with other county, State and Federal agencies and organizations.

Duty 12 - MAINTAIN AND INCREASE PERSONAL PROFESSIONAL COMPETENCIES

This duty could include the following job tasks: Evaluate personal areas of strengths and weaknesses; Develop long-range plan for professional growth; Read relevant periodicals, publications; Participate in training conferences, workshops; Participate in professional organizations and meetings; Take formal education courses; Learn how to use equipment needed for programs.

Duty 13 - PERFORM ADMINISTRATIVE FUNCTIONS

This duty could include the following job tasks: Complete administrative reports and vouchers; Participate in staff meetings; See that office equipment is maintained; Set up/maintain filing system; Represent program areas in administrative decisions; Order supplies; Ensure that program operations are in compliance with affirmative action requirements; Ensure that County Extension Office is in compliance with Equal Employment Opportunity requirements; Provide information for budget preparation; Prepare and get approval for budget for county program; Serve on office committees; Participate in staff performance appraisal activities; Participate in recruiting, hiring, and training activities.

Duty 14 - SUPERVISE STAFF

This duty could include the following job tasks: Identify staff needs and abilities; Make assignments and explain duties; Assist staff in program development and execution; Monitor staff performance; Give feedback and recognition to staff; Coordinate work of staff; Formally evaluate appropriate staff.

PART II

BACKGROUND DATA

Check (✓) the answers which most adequately describe you or your situation at the present time as it relates to your present volunteer capacity with the Cooperative Extension Service. Please respond to all questions. Thank you!

1. What is your present position? check here Col. 60

Extension Council Member _____	()	(1)
4-H Committee Member _____	()	(2)
4-H Club Organization Leader _____	()	(3)
Other _____	()	(4)

2. How long have you held your present position? Col. 61

Less than one year _____	()	(1)
One to three years _____	()	(2)
Four or more years _____	()	(3)

3. Your education? Col. 62

Completed 11th grade or less _____	()	(1)
High School Graduate _____	()	(2)
Trade, Business or Technical School Diploma or one to three years of college _____	()	(3)
College Graduate (four years) _____	()	(4)
Graduate Degree _____	()	(5)

4. Your sex? Col. 63

Male _____()_____ (1) Female _____()_____ (2)

5. The Professional 4-H and Youth Leader in your county is: Col. 64

Less than full time in a single county _____	()	(1)
Full time single county _____	()	(2)
Full time two county _____	()	(3)
Other (list) _____	()	(4)

6. Were you ever a 4-H member? Col. 65

Yes _____()_____ (1) No _____()_____ (2)

APPENDIX C. TWO EXPLANATORY LETTERS FROM: (a) THIS INVESTIGATOR,
CO-SIGNED BY DIRECTOR OF THE IOWA CES, AND (b) AIR



June 1, 1977

To: County Extension Directors
4-H and Youth Leaders
Extension Home Economists

Dear Co-Workers:

Enclosed is the job analysis questionnaire, developed by American Institutes for Research, looking at the roles of and knowledge, skills and abilities of 4-H and Youth Leaders, County Extension Directors and Extension Home Economists. The enclosed memo from Dr. Clifford Hahn provides background information. Because of the importance of this undertaking, the Iowa Cooperative Extension Service agreed to be one of the eight pilot states involved in the initial phase of this project.

Please complete the questionnaire and return it by June 30, 1977. If you cannot return it by the 30th, please inform us. The questionnaire is to be returned to Don Goering, the Project Coordinator for Iowa.

As a continuing part of the detailed study of the Extension 4-H and Youth Leader positions in Iowa, responses of the 4-H and Youth Leaders of Section II will be summarized and compared to an identical questionnaire sent to 480 randomly selected Extension Council members, 4-H Committee members and 4-H organizational leaders from 20 Iowa counties.

We sincerely thank you for your cooperation, assistance and timely completion of the questionnaire.

Sincerely,

Donald H. Goering
Assistant to the Director,
Personnel and
Iowa Project Coordinator

Charles E. Donhowe
Dean and Director

DHG/CED/aes

cc: Area Extension Directors

Enclosures

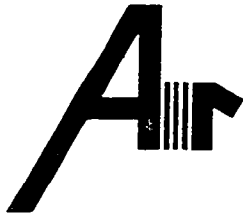
... AND JUSTICE FOR ALL

Programs and activities of Cooperative Extension Service are available to all potential clientele without regard to race, color, sex or national origin. Anyone who feels discriminated against should send a complaint within 180 days to the Secretary of Agriculture, Washington, D.C. 20250



AN EQUAL OPPORTUNITY EMPLOYER

Iowa State University and U.S. Department of Agriculture cooperating



AMERICAN INSTITUTES FOR RESEARCH
IN THE BEHAVIORAL SCIENCES

1055 Thomas Jefferson Street, NW, Washington, DC 20007 • 202 686 6801

May 1977

MEMORANDUM TO: County Extension Agents

SUBJECT: Personnel and Performance Appraisal Project

In early 1976, the ECOP requested a task force to give leadership to the development of personnel and performance evaluation instruments and procedures for voluntary use by CES. In conjunction with this task force activity, ES/USDA, utilizing federal funds, issued a Request for Proposal for a project to develop model personnel and performance appraisal instruments and procedures. Through regular competitive procedures, the contract for a 25-month project was awarded to the American Institutes for Research (AIR) which has many years of experience in developing and analyzing personnel systems and practices.

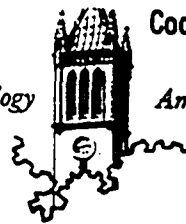
The project involves three major efforts. One is an in-depth job analysis of extension agents at the county level working in the program areas of agriculture, 4-H/youth, and home economics/family living. The second and third, respectively, are the development of model selection and performance evaluation instruments and procedures. Eight states, two from each ES region are actively participating in this project.

You are requested to participate in the job analysis phase of the project by completing and returning the enclosed Job Analysis Questionnaire. The questionnaire is designed to collect data in two important areas. One deals with the major functional duties carried out by county extension agents and the specific job tasks associated with these duty areas. The second deals with the knowledge, skills, abilities and other agent characteristics which may be necessary to satisfactorily carry out these job tasks and duties. Some background data is also requested so that the AIR project staff can analyze the data in order to identify similarities and differences between and among job classes and states. The questionnaire is based upon data collected by the project staff in a series of field interviews in the eight participating states.

If the model selection and performance evaluation procedures are to reflect the requirements of a broad sample representative of CES operations throughout the U.S., prompt responses are needed from as many agents as possible in the eight states. In order to facilitate the administration of the questionnaires, they are being distributed through the project coordinators appointed in each of the participating states. Your cooperation in completing and returning the questionnaires in accordance with the instructions from your state office as promptly as possible will be greatly appreciated.

Clifford P. Hahn
Project Director

APPENDIX D. EXPLANATORY LETTER TO AREA AND STATE ADMINISTRATORS



July 8, 1977

To: Area Extension Directors
State 4-H Staff

I recently forwarded a lengthy job analysis questionnaire to the field staff as a part of a national study, as explained in the attached letter from Mr. Clifford Hahn. Virtually, the entire field staff has returned the questionnaire at this point in time.

I am now coming to you, requesting that you complete Sections I and II only (through page 13) of the Job Analysis Questionnaire, as a part of our continuing study looking specifically at the role of the professional 4-H and Youth Leader in Iowa. Specifically, please complete this questionnaire as you in your present position expect the role of the Extension 4-H and Youth Leader to be performed in the counties in Iowa that have professional Extension 4-H and Youth Leaders.

I am seeking your cooperation in this task, as we try to accomplish two objectives:

1. To improve our selection criteria of 4-H and Youth Leaders in Iowa.
2. To gather additional data for use in my Ph.D. dissertation.

At this point in time, my success under point 2 is dependent upon you.

Please complete Sections I and II of the enclosed questionnaire and return it to me by July 29, 1977, if at all possible.

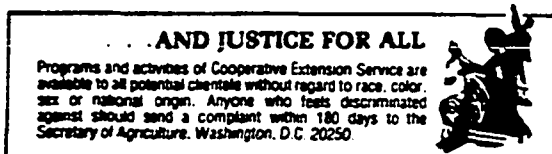
Sincerely,

Donald H. Goering
Assistant to the Director,
Personnel

DEG/aes

Enclosures

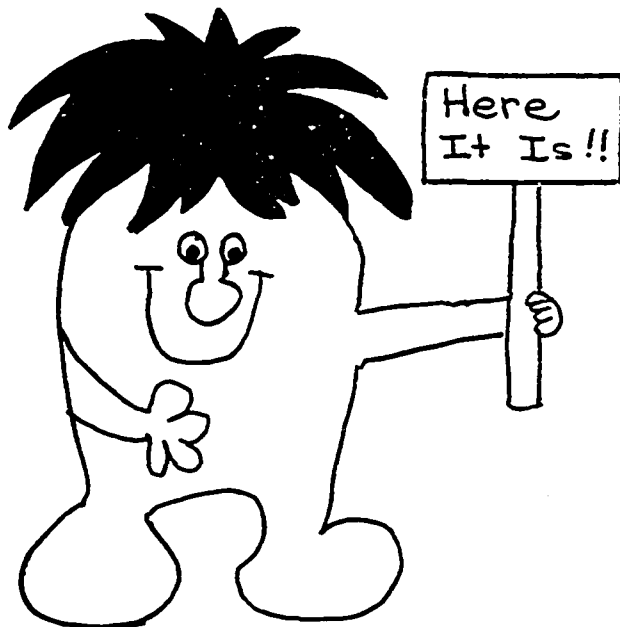
P.S. Area Directors -- Please use the copy we sent to you in June.



AN EQUAL OPPORTUNITY EMPLOYER

Iowa State University and U. S. Department of Agriculture cooperating

APPENDIX E. EXPLANATORY LETTER TO THREE VOLUNTEER LAY GROUPS



Dear Extension Friend:

Here is the questionnaire that we wrote you about! You, and twenty-three other volunteers involved with the Cooperative Extension Service in your county, have been randomly selected to participate in this study of job analysis of the professional Extension 4-H and Youth Leaders in Iowa.

Your completion of this questionnaire will enable us to improve our selection criteria in evaluating future applicants for the professional Extension 4-H and Youth Leader position employed by the Iowa Cooperative Extension Service. Please return it in the enclosed postage-provided and addressed envelope by JULY 22, 1977.

A number has been placed at the upper right hand corner of the questionnaire. Upon receipt of your completed questionnaire we will record that you have returned it, and then clip your number from the questionnaire. Thus, there will be no way to determine your individual response and secondly, we won't have to send you a reminder to return the questionnaire.

Your cooperation is sincerely requested. The success of this project depends upon your taking the time to complete the enclosed questionnaire. We realize that you, as a volunteer, are extremely busy, but your response could have a tremendous impact on the selection criteria used by the Cooperative Extension Service in the selection of 4-H and Youth Leaders.

Please feel free to call me if you have any questions. My office phone is 515/294-3283 and my home phone is 515/232-1736.

Thank you for your cooperation. I hope to receive your completed questionnaire by July 22.

Sincerely,

Donald H. Goering
Assistant to the Director
Personnel

Enclosure:
DHG:dag

... AND JUSTICE FOR ALL

Programs and activities of Cooperative Extension Service are available to all potential clientele without regard to race, color, sex or national origin. Anyone who feels discriminated against should send a complaint within 180 days to the Secretary of Agriculture, Washington, D.C. 20250



AN EQUAL OPPORTUNITY EMPLOYER

Iowa State University and U. S. Department of Agriculture cooperating

APPENDIX F. INTRODUCTORY POST CARD SENT TO ALERT SELECTED VOLUNTEER
LAY GROUPS

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS
U.S. DEPARTMENT OF AGRICULTURE AND IOWA STATE UNIVERSITY OF SCIENCE AND
TECHNOLOGY COOPERATING



Dear Extension Friend:

Within the next few days you will receive a familiar large brown ISU Extension envelope from me.

The envelope contains an important questionnaire regarding 4-H Work in Iowa. WE NEED YOUR HELP IN ANSWERING AND RETURNING THE QUESTIONNAIRE!

Please, watch for it in the mail. Thank you very much for your assistance.

Sincerely,

Donald H. Goering
Donald H. Goering
Ass't to the Director
Personnel

APPENDIX G. REMINDER CARD SENT TO RESPONDENTS WHO HAD NOT RETURNED
QUESTIONNAIRES

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS
U.S. DEPARTMENT OF AGRICULTURE AND IOWA STATE UNIVERSITY OF SCIENCE AND
TECHNOLOGY COOPERATING



Dear Extension Friend:

WE MISSED HEARING FROM YOU! The Extension 4-H & Youth Job Analysis Questionnaire we sent you has not been received yet.

The completed questionnaire is very important to the success of our project. Your response represents input from volunteer leaders, committee members and Extension council members throughout Iowa.

I know this is an extremely busy time, but PLEASE, will you take a few minutes to fill out the questionnaire. If you have misplaced it, call my office collect

(515/294-3283) for an additional copy. Your response is sincerely needed by August 5, 1977. THANK YOU for your cooperation.

Donald H. Goering
Donald H. Goering

Assistant to the Director, Personnel
109 Curtiss ISU Ames, Ia. 50011

Iowa Cooperative Extension

APPENDIX H. LETTER TO COUNTY EXTENSION STAFF ASKING FOR ASSISTANCE IN
HELPING TO CONTACT RESPONDENTS WHO WERE LATE IN RETURNING
QUESTIONNAIRES



Dear

On July 5, 1977, a questionnaire, like the enclosed copies, was sent to eight randomly selected Extension Council members, eight 4-H Committee members, and eight 4-H Organizational Leaders in your County. A listing of those individuals selected is enclosed. I need your HELP. The return response has been very disappointing up to this point, particularly from the 4-H Club Organizational Leaders. You will note that the sheet indicates on the left side those who have returned the questionnaire.

You could help us tremendously by contacting those who have not yet returned the questionnaire and encouraging them to complete and return it. Each individual was provided a 24¢-stamped and addressed envelope in which to return the questionnaire.

As you contact the lay volunteer leaders in your County, should you find that they have misplaced the questionnaire, please code one of the blank questionnaires with the number to the right of their name on the list, and provide them another copy. Please encourage them to return the questionnaire by August 5, 1977. This study has two purposes: 1) to help us improve our understanding of the role of the Extension 4-H leaders as we strive to improve our selection procedures; 2) to gather data that can be used in a Ph.D. dissertation.

A very few individuals have returned the questionnaire after removing the identification number, and could legitimately say "I have already returned it."

Your help is needed and will be very much appreciated. If you have time scheduled out of the office, perhaps the summer aide, if you have one, could make the contacts.

Thanks for your help.

Sincerely,

Donald H. Goering
Assistant to the Director,
Personnel

DHG/pl
Enclosures

... AND JUSTICE FOR ALL

Programs and activities of Cooperative Extension Service are available to all potential clientele without regard to race, color, sex or national origin. Anyone who feels discriminated against should send a complaint within 180 days to the Secretary of Agriculture, Washington, D.C. 20250



AN EQUAL OPPORTUNITY EMPLOYER

Iowa State University and U. S. Department of Agriculture cooperating

APPENDIX I. TASK ANALYSIS RESULTS

Table 37. Task analysis results

Duty area ^a	Task ^a	Ext. 4-H & Youth Ldrs. who reported task was performed		Area & State Admin. who reported expectation task be performed		Rel. time spent Ext. 4-H & Youth Leaders	
		No.	%	No.	%	Mean	S.D.
1	1	34	82.9	19	90.5	4.852	2.401
1	2	32	78.0	21	100	3.000	1.984
1	3	32	78.0	21	100	3.812	2.264
1	4	37	90.2	21	100	4.162	1.937
1	5	36	87.8	20	95.2	5.055	2.164
1	6	27	65.9	19	90.5	4.037	2.103
1	7	36	87.8	21	100	5.138	2.016
1	8	24	58.5	20	95.2	3.833	1.810
1	9	14	34.1	11	52.4	3.642	1.550
2	1	39	95.1	20	95.2	3.487	2.101
2	2	38	92.7	19	90.5	4.921	2.019
2	3	39	95.1	18	85.7	5.230	1.842
2	4	40	97.6	19	90.5	5.775	1.527
2	5	40	97.6	19	90.5	5.400	1.676
2	6	40	97.6	20	95.2	5.400	2.216
2	7	37	90.2	18	85.7	5.216	2.175
2	8	41	100	20	95.2	4.829	2.024
2	9	40	97.6	18	85.7	3.450	1.999
2	10	40	97.6	21	100	4.350	2.338
2	11	36	87.8	21	100	3.583	1.977
2	12	37	90.2	20	95.2	3.567	1.937
3	1	38	92.7	21	100	5.374	1.653
3	2	40	97.6	20	95.2	5.650	1.833
3	3	37	90.2	17	81	5.810	2.080
3	4	37	90.2	21	100	5.108	1.997
3	5	38	92.7	20	95.2	5.684	1.919
3	6	40	97.6	19	90.5	4.825	2.480
3	7	37	90.2	18	85.7	6.216	1.931
3	8	38	92.7	18	85.7	6.184	2.179
3	9	37	90.2	20	95.2	6.000	2.014
3	10	35	85.4	17	81	4.228	2.327
3	11	38	92.7	21	100	4.105	2.323
3	12	40	97.6	21	100	3.925	1.979
3	13	40	97.6	21	100	4.800	1.977

^aRefer to Appendix A to AIR Questionnaire for identification of duty and task.

Relative time spent		Relative criticality			
Area & State Admin.		Ext. 4-H & Youth Leaders		Area & State Admin.	
Mean	S.D.	Mean	S.D.	Mean	S.D.
4.421	1.805	7.151	1.698	6.473	1.867
2.857	1.014	4.935	2.048	3.904	1.841
3.428	1.326	5.838	1.985	4.761	1.841
3.714	1.678	5.444	1.647	4.476	1.778
4.950	1.877	6.685	2.040	6.550	1.191
3.947	1.779	5.769	1.505	5.894	1.663
5.523	1.887	7.200	1.549	7.476	1.692
3.550	1.468	5.666	1.786	5.200	1.704
3.727	1.849	4.357	1.447	5.181	1.401
2.800	1.765	4.210	2.029	3.789	1.548
3.684	1.765	6.297	1.998	5.631	2.431
4.555	1.854	6.894	1.689	6.500	2.065
5.368	1.606	6.974	1.308	6.315	1.493
5.319	1.565	6.846	1.348	6.210	1.398
4.450	1.572	6.820	1.699	6.600	1.603
5.111	1.676	6.722	1.632	6.833	1.724
5.200	1.704	6.250	1.597	7.150	1.496
2.666	1.283	4.153	1.829	4.111	1.779
3.142	1.424	5.743	2.136	5.142	2.242
3.333	1.623	5.571	1.914	5.238	1.513
1.950	1.191	3.527	2.236	3.300	1.780
4.571	1.660	7.189	1.288	6.476	1.436
4.800	1.881	6.410	1.601	5.650	1.182
4.411	1.278	6.916	1.697	6.352	1.367
4.571	1.568	6.111	1.753	5.904	1.513
4.750	1.888	7.135	1.751	7.050	1.849
3.578	1.774	5.974	2.096	5.473	1.611
4.611	1.650	6.944	1.413	5.888	1.711
6.166	1.505	7.324	1.510	7.166	1.654
5.600	2.113	6.638	1.397	6.300	1.867
2.411	1.278	5.352	2.334	4.411	1.770
3.571	2.014	5.378	2.215	5.761	2.364
3.714	1.953	5.717	1.716	5.761	1.814
4.476	1.940	6.615	1.616	6.952	1.627

Table 37, continued

Duty area	Ext. 4-H & Youth Ldrs. who reported task was performed		Area & State Admin. who reported expectation task be performed		Rel. time spent Ext. 4-H & Youth Leaders		
	Task	No.	%	No.	%	Mean	S.D.
4	1	39	95.1	21	100	4.948	2.460
	2	29	70.7	13	61.9	5.137	2.232
	3	32	78	15	71.4	4.000	2.514
	4	39	95.1	19	90.5	5.512	2.076
	5	34	82.9	17	81	2.970	1.946
	6	37	90.2	18	85.7	4.756	2.047
	7	37	90.2	19	90.5	6.675	2.212
	8	38	92.7	19	90.5	5.789	2.256
	9	37	90.2	18	85.7	4.810	2.080
	10	40	97.6	20	95.2	4.675	2.080
5	1	37	90.2	19	90.5	4.837	2.035
	2	38	92.7	18	85.7	4.763	2.098
	3	38	92.7	19	90.5	4.368	2.072
	4	36	87.8	19	90.5	4.166	1.890
	5	15	36.6	9	42.9	3.133	1.767
	6	34	82.9	19	90.5	3.764	2.244
6	1	32	78	18	85.7	4.312	2.235
	2	27	65.9	17	81	4.000	2.842
	3	29	70.7	18	85.7	4.310	1.671
	4	19	46.3	16	76.2	4.421	2.434
	5	26	63.4	15	71.4	4.230	2.250
	6	27	65.9	19	90.5	3.481	1.909
	7	14	34.1	14	66.7	4.142	1.512
	8	13	31.7	7	33.3	3.307	1.702
	9	18	43.9	16	76.2	4.444	2.036
7	1	38	92.7	20	95.2	4.921	2.235
	2	31	75.6	20	95.2	4.419	1.822
	3	38	92.7	20	95.2	5.315	2.157
	4	38	92.7	20	95.2	5.473	1.885
	5	34	82.9	19	90.5	4.529	2.205
	6	39	95.1	20	95.2	5.256	1.831
	7	40	97.6	20	95.2	7.050	1.768
	8	37	90.2	19	90.5	4.945	2.345
	9	40	97.6	20	95.2	7.075	2.117
	10	37	90.2	20	95.2	5.054	2.107
	11	34	82.9	19	90.5	4.235	1.924
	12	34	82.9	21	100	4.558	2.077

Relative time spent		Relative criticality			
Area & State Admin.		Ext. 4-H & Youth Leaders		Area & State Admin.	
Mean	S.D.	Mean	S.D.	Mean	S.D.
4.190	1.861	6.315	2.255	5.476	1.401
4.307	2.250	6.071	2.567	4.692	2.213
2.666	1.589	5.225	2.125	3.466	1.807
4.684	1.974	5.815	1.843	5.578	1.610
2.058	1.345	4.697	2.443	4.176	2.506
3.722	2.321	5.833	2.360	5.444	1.947
7.368	1.342	7.888	1.635	8.631	0.761
5.421	2.194	6.055	1.970	6.894	1.729
4.000	1.940	6.085	1.755	5.944	1.589
4.000	2.449	6.578	1.765	6.300	1.809
4.263	2.104	6.222	1.822	5.157	1.642
4.555	2.431	5.837	2.035	5.111	2.193
3.473	2.038	6.027	1.878	4.947	1.682
4.263	2.423	5.571	1.852	5.210	2.347
2.333	1.581	4.333	2.257	3.111	2.088
2.842	1.573	5.636	1.997	5.368	2.241
3.444	1.688	5.871	2.277	4.833	1.790
3.000	1.500	4.769	2.847	3.294	1.724
3.166	1.724	5.607	2.250	4.388	1.720
3.125	1.258	5.789	2.760	4.125	1.668
3.133	1.885	5.600	2.449	4.800	2.242
3.473	2.144	4.923	2.481	4.894	2.079
2.714	1.204	4.928	1.940	3.357	1.737
1.714	0.756	4.230	2.279	3.000	1.732
2.062	1.237	5.222	2.102	3.625	2.029
5.300	1.895	6.815	1.753	6.850	1.599
4.450	2.064	6.548	1.767	6.150	1.663
5.000	1.717	6.894	1.984	6.350	1.843
5.750	1.713	7.815	1.312	7.450	1.146
5.368	1.383	7.058	1.669	7.263	1.368
5.000	1.654	7.051	1.555	6.950	1.191
7.600	1.635	8.200	1.018	8.400	0.883
5.157	1.772	6.810	2.066	6.789	1.398
7.700	1.525	8.150	1.424	7.950	1.191
4.100	1.483	7.054	1.747	6.150	1.387
3.894	1.912	6.441	1.460	5.578	1.427
4.381	2.109	6.470	1.674	6.285	1.765

Table 37, continued

Duty area	Ext. 4-H & Youth			Area & State Admin.		Rel. time spent	
	Ldrs. who reported task was performed			who reported expectation task be performed		Ext. 4-H & Youth Leaders	
Task	No.	%	No.	%	Mean	S.D.	
8 1	30	73.2	18	85.7	3.933	2.243	
8 2	28	68.3	21	100	4.357	2.453	
8 3	25	61	19	90.5	4.000	1.893	
8 4	33	80.5	21	100	4.181	1.991	
8 5	29	70.7	21	100	4.379	2.111	
8 6	36	87.8	20	95.2	5.388	2.195	
9 1	38	92.7	19	90.5	5.210	2.361	
9 2	32	78	19	90.5	4.281	2.174	
9 3	35	85.4	20	95.2	4.942	2.209	
9 4	40	97.6	21	100	4.500	2.075	
9 5	33	80.5	21	100	4.181	2.023	
10 1	37	90.2	20	95.2	4.567	2.421	
10 2	34	82.9	19	90.5	4.441	2.063	
10 3	38	92.7	21	100	5.605	2.400	
10 4	38	92.7	21	100	5.210	1.919	
10 5	40	97.6	21	100	5.225	2.057	
10 6	36	87.8	21	100	4.222	2.153	
10 7	29	70.7	19	90.5	4.103	2.193	
10 8	32	78	18	85.7	4.375	2.181	
11 1	39	95.1	20	95.2	5.025	2.146	
11 2	36	87.8	21	100	4.361	2.127	
11 3	39	95.1	19	90.5	4.615	2.313	
11 4	39	95.1	21	100	5.025	2.367	
11 5	39	95.1	21	100	4.051	2.235	
11 6	39	95.1	21	100	4.512	2.211	
11 7	40	97.6	21	100	3.650	2.225	
11 8	39	95.1	20	95.2	3.871	2.142	
12 1	39	95.1	21	100	4.923	2.018	
12 2	35	85.4	21	100	4.542	2.267	
12 3	41	100	21	100	4.561	1.988	
12 4	41	100	21	100	5.536	2.026	
12 5	38	92.7	21	100	4.815	1.829	
12 6	28	68.3	21	100	4.750	2.222	
12 7	40	97.6	20	95.2	3.325	2.246	

Relative time spent		Relative criticality			
Area & State Admin.		Ext. 4-H & Youth Leaders		Area & State Admin.	
Mean	S.D.	Mean	S.D.	Mean	S.D.
3.555	.1822	5.266	1.818	4.777	1.665
4.238	2.071	5.714	1.536	6.047	1.532
3.157	1.608	5.400	1.915	5.052	1.870
4.047	1.987	5.939	1.391	5.952	1.687
3.761	1.947	6.379	1.568	6.238	2.119
4.350	1.785	6.583	1.402	6.150	1.694
3.842	1.708	5.342	1.878	4.421	1.216
3.210	1.932	5.156	2.157	4.842	1.675
4.450	2.064	5.485	1.755	6.000	1.451
2.714	1.765	4.500	1.948	3.666	1.958
3.190	1.914	5.575	2.194	4.904	1.578
4.200	1.508	6.567	1.803	6.100	1.774
4.421	2.143	5.617	2.075	4.947	2.068
5.238	1.921	6.894	1.767	6.809	1.750
4.619	1.717	6.973	1.461	6.619	1.431
4.428	2.135	7.025	1.641	6.142	1.389
3.476	1.750	5.166	2.210	4.666	2.082
2.578	1.427	6.069	2.052	4.684	2.162
3.000	1.534	5.781	1.862	4.166	1.823
3.650	1.927	6.512	1.636	5.700	1.559
3.571	1.690	5.416	1.933	4.666	1.653
3.157	2.007	5.717	1.946	4.789	2.149
3.809	1.806	6.307	2.015	5.142	1.905
3.952	1.802	5.487	2.050	5.381	1.687
3.952	1.910	6.256	1.802	6.285	1.848
2.809	1.401	5.625	1.835	5.047	2.355
2.900	1.119	5.641	1.993	4.700	1.895
3.476	1.662	6.820	1.745	6.238	2.095
2.904	1.513	6.257	1.721	6.476	1.914
3.714	1.765	6.365	1.854	5.809	1.750
4.952	1.746	7.000	1.597	6.904	1.513
3.619	1.596	6.184	1.887	5.238	1.921
3.000	1.871	5.607	2.006	5.000	1.581
2.400	1.635	5.075	2.141	4.900	1.971

Table 17, continued

Duty area		Ext. 4-H & Youth Ldrs. who reported task was performed		Area & State Admin. who reported expectation task be performed		Rel. time spent Ext. 4-H & Youth Leaders	
	Task	No.	%	No.	%	Mean	S.D.
13	1	32	78.0	16	76.2	5.187	2.101
13	2	40	97.6	21	100	5.575	1.880
13	3	5	12.2	10	47.6	3.600	1.949
13	4	22	53.7	13	61.9	4.318	2.191
13	5	26	63.4	19	90.5	4.769	1.904
13	6	25	61	11	52.4	3.960	2.371
13	7	39	95.1	21	100	4.461	2.246
13	8	9	22	12	57.1	3.888	2.522
13	9	11	26.8	18	85.7	3.727	2.102
13	10	4	9.8	6	28.6	4.250	2.217
13	11	13	31.7	17	81	3.076	2.326
13	12	28	68.3	18	85.7	3.678	2.450
13	13	30	73.2	19	90.5	4.100	2.203
14	1	29	70.7	18	85.7	4.655	2.143
14	2	31	75.6	16	76.2	5.871	1.668
14	3	34	82.9	20	95.2	5.617	2.045
14	4	28	68.3	17	81	5.035	1.688
14	5	34	82.9	20	95.2	5.000	2.335
14	6	28	68.3	18	85.7	5.607	2.315
14	7	29	70.7	17	81	4.103	2.335

Relative time spent		Relative criticality			
Area & State Admin.		Ext 4-H & Youth Youth Leaders		Area & State Admin.	
Mean	S.D.	Mean	S.D.	Mean	S.D.
2.187	1.223	5.906	2.085	4.937	2.407
4.190	2.064	6.350	1.916	6.809	1.692
1.900	1.370	4.000	2.236	3.000	1.333
2.692	1.888	4.909	2.202	3.923	2.178
3.684	2.262	6.153	1.974	6.000	1.795
1.909	1.136	5.000	2.466	3.636	2.838
3.857	2.104	6.461	2.037	6.952	1.910
3.833	2.209	6.666	1.803	6.500	2.316
2.222	1.555	6.363	2.157	4.888	2.324
2.333	1.966	6.750	2.630	4.500	2.258
2.294	1.312	4.384	2.256	3.823	1.667
2.833	1.978	5.321	2.229	6.222	2.510
3.052	2.248	5.433	1.888	5.473	2.568
3.888	1.967	6.724	1.667	6.166	2.007
4.375	2.277	7.193	1.579	6.687	1.778
4.550	2.502	6.852	1.956	6.850	2.207
4.647	2.317	6.964	1.427	6.352	2.060
3.850	1.843	6.970	1.817	6.000	2.362
5.333	2.086	7.000	1.764	6.666	1.879
3.764	2.306	6.172	2.089	6.470	2.401

APPENDIX J. NUMBERS, PERCENTAGES AND MEANS OF RESPONDENTS FOR THE 14
DUTY AREAS

Table 38. The numbers, percentages and means of respondents for the 14 duty areas when classified by position of respondents

Duty _b Area		Group 1 ^a		Group 2 ^a		Group 3 ^a		Group 4 ^a		Group 5 ^a	
		N	%	N	%	N	%	N	%	N	%
1	If Performed	101	87.1	87	77.7	80	77.7	37	90.2	21	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	5.867		6.264		5.467		3.944		3.809	
	Criticality	5.211		6.058		5.955		5.864		5.619	
	Difficulty							6.378		6.238	
2	If Performed	111	95.7	86	85.7	93	90.3	40	97.6	21	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	5.691		6.063		5.967		4.512		3.523	
	Criticality	6.226		6.542		6.708		5.700		5.428	
	Difficulty							5.125		4.666	
3	If Performed	107	92.2	101	90.2	98	95.1	40	97.6	21	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	6.421		6.490		6.833		6.282		5.142	
	Criticality	6.670		6.545		6.814		6.725		6.721	
	Difficulty							4.975		5.190	

^aGroup 1 = County Agricultural Extension Council members; Group 2 = 4-H Expansion and Review Committee members; Group 3 = 4-H Club Organizational Leaders; Group 4 = Extension 4-H and Youth Leaders; Group 5 = Area and State Administrators.

^bSee Appendix A for duty areas listed in AIR questionnaire.

Table 38, continued

Duty _b Area		Group 1 ^a		Group 2 ^a		Group 3 ^a		Group 4 ^a		Group 5 ^a	
		N	%	N	%	N	%	N	%	N	%
4	If Performed	111	95.7	102	91.1	99	96.1	40	97.6	21	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	6.467		6.633		6.618		6.948		7.142	
	Criticality	6.878		6.750		6.848		6.950		7.333	
	Difficulty							4.375		5.190	
5	If Performed	106	91.4	93	83.0	96	93.2	40	97.6	21	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	5.870		6.032		6.010		5.125		4.381	
	Criticality	6.436		6.131		6.304		6.025		5.095	
	Difficulty							4.175		3.952	
6	If Performed	89	76.7	66	58.9	74	71.8	31	75.6	20	95.2
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	5.452		5.907		5.541		4.032		2.650	
	Criticality	6.025		5.906		5.952		4.903		3.650	
	Difficulty							5.000		4.100	
7	If Performed	107	92.2	98	87.5	100	97.1	41	100	21	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	6.466		6.673		6.247		7.425		7.666	
	Criticality	6.666		6.772		6.360		8.365		8.190	
	Difficulty							6.536		7.333	

Table 38, continued

Duty _b Area ^a		Group 1 ^a		Group 2 ^a		Group 3 ^a		Group 4 ^a		Group 5 ^a	
		N	%	N	%	N	%	N	%	N	%
8	If Performed	98	84.5	89	87.5	87	84.5	41	100	21	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	5.435		4.721		5.000		4.850		4.285	
	Criticality	5.373		5.250		5.360		6.317		6.428	
	Difficulty							6.682		7.714	
9	If Performed	98	84.5	85	75.9	83	80.6	41	100	21	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	4.521		4.752		4.463		4.950		4.095	
	Criticality	4.885		4.879		4.600		5.512		5.047	
	Difficulty							5.195		4.238	
10	If Performed	109	94.0	103	92.0	94	91.3	41	100	21	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	5.621		5.864		5.500		5.400		4.761	
	Criticality	6.135		6.019		5.802		6.707		6.190	
	Difficulty							4.170		4.476	
11	If Performed	101	87.1	82	73.2	87	84.5	35	84.5	21	100

Table 38, continued

Duty _b Area		Group 1 ^a		Group 2 ^a		Group 3 ^a		Group 4 ^a		Group 5 ^a	
11	continued	\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	4.715		4.524		4.821		4.117		4.190	
	Criticality	5.092		4.519		5.369		5.200		4.619	
	Difficulty							4.371		4.142	
12	If Performed	N	%	N	%	N	%	N	%	N	%
		97	83.6	85	75.9	83	80.6	40	97.6	21	100
	Time Spent	\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Criticality	4.760		4.642		4.592		5.000		4.428	
	Difficulty	5.011		5.012		4.847		5.900		5.381	
								4.775		4.857	
13	If Preferred	N	%	N	%	N	%	N	%	N	%
		102	87.9	83	74.1	78	75.7	36	87.8	21	100
	Time Spent	\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Criticality	4.395		4.500		4.815		4.305		3.142	
	Difficulty	5.144		4.412		4.303		4.694		4.333	
								4.222		3.952	
14	If Performed	N	%	N	%	N	%	N	%	N	%
		87	75.0	82	73.2	77	74.8	37	90.2	20	95.2
	Time Spent	\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Criticality	4.536		4.518		4.578		4.756		4.050	
	Difficulty	5.105		4.600		4.727		5.945		5.050	
								5.054		5.750	

Table 39. The numbers, percentages and means of respondents for the 14 duty areas when classified by number of years in present position

Duty _b Area		Group 1 ^a		Group 2 ^a		Group 3 ^a	
1	If Performed	N	%	N	%	N	%
		78	81.3	142	83.5	106	83.5
	Time Spent Criticality	\bar{X}		\bar{X}		\bar{X}	
		5.684 6.196		5.892 6.082		4.923 5.845	
2	If Performed	N	%	N	%	N	%
		90	93.8	156	91.8	115	90.6
	Time Spent Criticality	\bar{X}		\bar{X}		\bar{X}	
		5.681 6.378		5.810 6.402		5.265 6.152	
3	If Performed	N	%	N	%	N	%
		85	88.5	160	94.1	122	96.1
	Time Spent Criticality	\bar{X}		\bar{X}		\bar{X}	
		6.566 6.717		6.464 6.644		6.383 6.708	

^aGroup 1 = Respondents with less than one year of service in present position; Group 2 = Respondents with one to three years of service in present position; Group 3 = Respondents with four or more years of service in present position.

^bSee Appendix A for duty areas listed in AIR questionnaire.

Table 39, continued

Duty _b Area		Group 1 ^a		Group 2 ^a		Group 3 ^a	
		N	%	N	%	N	%
4	If Performed	90	93.8	160	94.1	123	96.9
	Time Spent	\bar{X} 6.011		\bar{X} 6.625		\bar{X} 7.123	
	Criticality	6.494		6.864		7.147	
5	If Performed	89	92.7	148	87.1	119	93.7
	Time Spent	\bar{X} 5.885		\bar{X} 5.831		\bar{X} 5.627	
	Criticality	6.268		6.335		5.926	
6	If Performed	72	97.0	111	65.3	97	76.4
	Time Spent	\bar{X} 5.710		\bar{X} 5.112		\bar{X} 4.979	
	Criticality	5.863		5.796		5.340	
7	If Performed	84	87.5	159	93.5	124	97.6
	Time Spent	\bar{X} 6.195		\bar{X} 6.606		\bar{X} 6.983	
	Criticality	6.448		6.993		7.130	

Table 39, continued

Duty _b Area		Group 1 ^a		Group 2 ^a		Group 3 ^a	
		N	%	N	%	N	%
8	If Performed	82	85.4	153	90.0	110	86.6
	Time Spent	\bar{X} 5.075		\bar{X} 5.114		\bar{X} 4.707	
	Criticality	5.459		5.510		5.594	
9	If Performed	76	79.2	144	84.7	108	85.0
	Time Spent	\bar{X} 5.108		\bar{X} 4.468		\bar{X} 4.401	
	Criticality	5.014		4.909		4.848	
10	If Performed	88	91.7	160	94.1	120	94.5
	Time Spent	\bar{X} 5.837		\bar{X} 5.703		\bar{X} 5.245	
	Criticality	6.000		6.242		5.991	
11	If Performed	76	79.2	139	81.8	111	87.4
	Time Spent	\bar{X} 4.837		\bar{X} 4.522		\bar{X} 4.518	
	Criticality	4.746		5.110		4.990	

Table 39, continued

Duty _b Area		Group 1 ^a		Group 2 ^a		Group 3 ^a	
12	If Performed	N	%	N	%	N	%
		78	81.3	142	83.5	106	83.5
		\bar{X}		\bar{X}		\bar{X}	
13	Time Spent	4.644		4.705		4.717	
	Criticality	4.845		5.229		5.151	
		\bar{X}		\bar{X}		\bar{X}	
14	If Performed	N	%	N	%	N	%
		78	81.3	142	83.5	100	78.7
		\bar{X}		\bar{X}		\bar{X}	
14	Time Spent	4.657		4.532		4.122	
	Criticality	4.394		5.091		4.186	
		\bar{X}		\bar{X}		\bar{X}	
14	If Performed	N	%	N	%	N	%
		71	74.0	133	78.2	99	78.0
		\bar{X}		\bar{X}		\bar{X}	
14	Time Spent	4.840		4.457		4.428	
	Criticality	4.953		5.188		4.717	
		\bar{X}		\bar{X}		\bar{X}	

Table 40. The numbers, percentages and means of respondents for the 14 duty areas when classified by sex classification

Duty _b Area		Group 1 ^a		Group 2 ^a	
		N	%	N	%
1	If Performed	174	83.3	152	82.6
	Time Spent	\bar{X} 5.552		\bar{X} 5.496	
	Criticality	6.183		5.854	
2	If Performed	N 193	% 92.3	N 168	% 91.3
	Time Spent	\bar{X} 5.358		\bar{X} 5.880	
	Criticality	6.213		6.430	
3	If Performed	N 194	% 92.8	N 173	% 94.0
	Time Spent	\bar{X} 6.128		\bar{X} 6.824	
	Criticality	6.519		6.858	

^aGroup 1 = Male; Group 2 = Female.

^bSee Appendix A for duty areas listed in AIR questionnaire.

Table 40, continued

Duty ^b Area		Group 1 ^a		Group 2 ^b	
		N	%	N	%
4	If Performed	199	95.2	174	94.6
	Time Spent	\bar{X} 6.683		\bar{X} 6.598	
	Criticality	6.847		6.895	
5	If Performed	186	89.0	190	92.4
	Time Spent	\bar{X} 5.631		\bar{X} 5.928	
	Criticality	6.196		6.168	
6	If Performed	153	73.2	127	69.0
	Time Spent	\bar{X} 5.178		\bar{X} 5.261	
	Criticality	5.678		5.633	
7	If Performed	193	92.3	174	94.6
	Time Spent	\bar{X} 6.668		\bar{X} 6.610	
	Criticality	6.938		6.889	

Table 40, continued

Duty _b Area		Group 1 ^a		Group 2 ^a	
8	If Performed	N	%	N	%
		179	85.6	166	90.2
		\bar{X}		\bar{X}	
9	Time Spent	5.035		4.914	
	Criticality	5.637		5.410	
		\bar{X}		\bar{X}	
10	If Performed	N	%	N	%
		180	86.1	148	80.4
		\bar{X}		\bar{X}	
11	Time Spent	4.514		4.687	
	Criticality	4.835		5.007	
		\bar{X}		\bar{X}	
12	If Performed	N	%	N	%
		196	93.8	172	93.5
		\bar{X}		\bar{X}	
13	Time Spent	5.359		4.835	
	Criticality	6.067		6.123	
		\bar{X}		\bar{X}	
14	If Performed	N	%	N	%
		169	80.9	157	85.3
		\bar{X}		\bar{X}	
15	Time Spent	4.543		4.649	
	Criticality	4.880		5.097	
		\bar{X}		\bar{X}	

Table 40, continued

Duty _b Area		Group 1 ^a		Group 2 ^a	
12	If Performed	N	%	N	%
		173	82.8	153	83.2
		\bar{X}		\bar{X}	
13	Time Spent	4.634		4.761	
	Criticality	5.160		5.069	
		\bar{X}		\bar{X}	
14	If Performed	N	%	N	%
		173	82.8	147	79.9
		\bar{X}		\bar{X}	
14	Time Spent	4.530		4.317	
	Criticality	4.878		4.372	
		\bar{X}		\bar{X}	
14	If Performed	N	%	N	%
		165	78.9	138	75.0
		\bar{X}		\bar{X}	
14	Time Spent	4.704		4.343	
	Criticality	5.304		4.593	
		\bar{X}		\bar{X}	

Table 41. The numbers, percentages and means of respondents for the 14 duty areas when classified by educational level completed by respondents

Duty _b Area		Group 1 ^a		Group 2 ^a		Group 3 ^a		Group 4 ^a		Group 5 ^a	
		N	%	N	%	N	%	N	%	N	%
1	If Performed	14	82.4	117	79.6	76	81.7	82	86.3	37	90.2
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	6.500		5.852		6.040		5.063		4.108	
	Criticality	5.454		6.009		6.126		6.166		5.756	
2	If Performed	16	94.1	129	87.8	84	90.3	91	95.8	41	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	6.000		6.000		6.024		5.102		4.463	
	Criticality	6.230		6.619		6.493		6.080		5.682	
3	If Performed	16	94.1	133	90.5	89	95.7	89	93.7	40	97.6
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	5.437		6.534		6.724		6.604		5.750	
	Criticality	5.153		6.739		6.817		6.720		6.650	

^aGroup 1 = Respondents who completed 11th grade or less; Group 2 = Respondents who are high school graduates; Group 3 = Respondents who have a trade, business or technical school diploma or one to three years of college; Group 4 = Respondents who are college (four year) graduates; Group 5 = Respondents who have graduate degrees.

^bSee Appendix A for duty areas listed in AIR questionnaire.

Table 41, continued

Duty _b Area		Group 1 ^a		Group 2 ^a		Group 3 ^a		Group 4 ^a		Group 5 ^a	
		N	%	N	%	N	%	N	%	N	%
4	If Performed	15	88.2	140	95.2	87	93.5	90	94.7	41	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	5.733		6.416		6.776		6.758		7.219	
	Criticality	6.166		6.555		7.125		7.092		7.073	
5	If Performed	15	80.2	132	89.8	85	91.4	83	87.4	41	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	6.200		6.078		6.012		5.333		5.073	
	Criticality	6.833		6.290		6.205		6.250		5.512	
6	If Performed	11	64.7	91	61.9	72	77.4	71	74.7	35	85.4
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	5.454		5.816		5.718		4.867		3.314	
	Criticality	5.500		6.112		5.850		5.731		4.142	
7	If Performed	15	88.2	135	91.8	86	92.5	90	94.7	41	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	6.466		6.313		6.500		6.954		7.365	
	Criticality	6.333		6.196		6.746		7.689		7.902	

Table 41, continued

Duty _b Area		Group 1 ^a		Group 2 ^a		Group 3 ^a		Group 4 ^a		Group 5 ^a	
		N	%	N	%	N	%	N	%	N	%
8	If Performed	16	94.1	118	80.3	81	87.1	90	94.7	40	97.6
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	5.062		5.201		5.151		4.741		4.450	
	Criticality	5.153		5.601		5.240		5.517		6.000	
9	If Performed	11	64.7	117	79.6	76	81.7	85	89.5	39	95.1
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	4.818		4.929		4.733		4.120		4.282	
	Criticality	4.750		5.330		4.911		4.481		4.717	
10	If Performed	15	88.2	135	91.8	88	94.6	89	93.7	41	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	6.266		5.641		5.732		5.569		4.878	
	Criticality	6.568		5.991		5.800		6.388		6.219	
11	If Performed	13	76.5	116	78.9	78	83.9	79	83.2	40	97.6
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	5.076		5.008		4.881		3.840		4.150	
	Criticality	5.111		5.710		4.831		4.320		4.675	

Table 41, continued

Duty _b Area		Group 1 ^a		Group 2 ^a		Group 3 ^a		Group 4 ^a		Group 5 ^a	
		N	%	N	%	N	%	N	%	N	%
12	If Performed	11	64.7	107	72.8	78	83.9	89	93.7	41	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	5.090		5.038		4.473		4.453		4.634	
	Criticality	5.500		5.468		4.464		5.070		5.439	
13	If Performed	11	64.7	119	81.0	76	81.7	76	80.0	38	92.7
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	6.545		4.704		4.743		3.794		3.605	
	Criticality	6.000		4.869		4.927		3.957		4.473	
14	If Performed	11	64.7	108	73.5	72	77.4	75	78.9	37	90.2
		\bar{X}		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	5.454		4.923		4.450		4.236		3.918	
	Criticality	5.666		5.173		4.636		4.652		5.513	

Table 42. The numbers, percentages and means of respondents for the 14 duty areas when classified by type of geographical assignment of the professional Extension 4-H and Youth Leaders

Duty _b Area		Group 1 ^a		Group 2 ^a		Group 3 ^a		Group 4 ^a	
1	If Performed	N	%	N	%	N	%	N	%
		65	77.4	106	82.2	131	84.5	24	96.0
	Time Spent	\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Criticality	5.375		5.740		5.732		3.916	
2	If Performed	N	%	N	%	N	%	N	%
		80	95.2	116	89.9	140	90.3	25	100
	Time Spent	\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Criticality	5.683		5.684		5.889		3.440	
3	If Performed	N	%	N	%	N	%	N	%
		76	90.5	119	92.2	147	94.8	25	100
	Time Spent	\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Criticality	6.500		6.709		6.507		4.920	

^aGroup 1 = Assignment is less than full-time single county; Group 2 = Assignment is full-time single county; Group 3 = Assignment is full-time two county; Group 4 = Area or state assignments.

^bSee Appendix A for duty areas listed in AIR questionnaire.

Table 42, continued

Duty Area ^b		Group 1 ^a		Group 2 ^a		Group 3 ^a		Group 4 ^a	
4	If Performed	N	%	N	%	N	%	N	%
		79	94.0	123	95.3	146	94.2	25	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
5	Time Spent	6.730		6.628		6.553		6.960	
	Criticality	7.095		6.843		6.729		7.080	
		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
6	If Performed	N	%	N	%	N	%	N	%
		78	92.5	113	87.6	140	90.3	25	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
7	Time Spent	6.289		5.864		5.674		4.360	
	Criticality	6.319		6.428		6.079		5.280	
		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
8	If Performed	N	%	N	%	N	%	N	%
		57	67.9	90	69.8	110	71.0	23	92.0
		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
9	Time Spent	5.745		5.363		5.311		2.956	
	Criticality	5.846		5.988		5.676		3.956	
		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
10	If Performed	N	%	N	%	N	%	N	%
		80	95.2	121	93.8	141	91.0	25	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
11	Time Spent	6.835		6.700		6.348		7.320	
	Criticality	6.613		6.921		6.873		8.000	
		\bar{X}		\bar{X}		\bar{X}		\bar{X}	

Table 42, continued

Duty Area ^b		Group 1 ^a		Group 2 ^a		Group 3 ^a		Group 4 ^a	
8	If Performed	N	%	N	%	N	%	N	%
		71	84.5	112	86.8	137	88.4	25	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	5.308		5.110		4.803		4.400	
	Criticality	5.750		5.495		5.241		6.480	
9	If Performed	N	%	N	%	N	%	N	%
		74	88.1	99	76.7	130	83.9	25	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	4.675		4.632		4.616		4.080	
	Criticality	4.865		4.945		4.872		5.120	
10	If Performed	N	%	N	%	N	%	N	%
		82	97.6	122	94.6	139	89.7	25	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	5.825		5.725		5.500		4.600	
	Criticality	5.920		6.336		5.968		6.160	
11	If Performed	N	%	N	%	N	%	N	%
		72	85.7	109	84.5	120	77.4	25	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	4.614		4.850		4.429		4.200	
	Criticality	4.938		5.050		4.990		4.840	

Table 42, continued

Duty _b Area		Group 1 ^a		Group 2 ^a		Group 3 ^a		Group 4 ^a	
12	If Performed	N	%	N	%	N	%	N	%
		67	79.8	105	81.4	129	83.2	25	100
		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	4.636		4.805		4.645		4.640	
	Criticality	5.116		5.163		5.025		5.360	
13	If Performed	N	%	N	%	N	%	N	%
		63	75.0	104	80.6	129	83.2	24	96.0
		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	4.200		4.568		4.632		3.375	
	Criticality	4.018		4.663		4.941		4.500	
14	If Performed	N	%	N	%	N	%	N	%
		58	69.0	107	82.9	114	73.5	24	96.0
		\bar{X}		\bar{X}		\bar{X}		\bar{X}	
	Time Spent	4.298		4.752		4.463		4.041	
	Criticality	4.463		4.989		5.173		5.250	

Table 43. The numbers, percentages and means of respondents for the 14 duty areas when classified by prior experience as a 4-H member

Duty _b Area		Group 1 ^a		Group 2 ^a	
		N	%	N	%
1	If Performed	225	82.7	101	83.5
	Time Spent	\bar{X} 5.396		\bar{X} 5.824	
	Criticality	6.023		6.032	
2	If Performed	248	91.2	113	93.4
	Time Spent	\bar{X} 5.473		\bar{X} 5.899	
	Criticality	6.184		6.611	
3	If Performed	253	93.0	114	94.2
	Time Spent	\bar{X} 6.358		\bar{X} 6.690	
	Criticality	6.595		6.876	

^aGroup 1 - yes; Group 2 = no.

^bSee Appendix A for duty areas listed in AIR questionnaire.

Table 43, continued

Duty Area ^b		Group 1 ^a		Group 2 ^a	
		N	%	N	%
4	If Performed	259	95.2	114	94.2
	Time Spent	\bar{X} 6.725		\bar{X} 6.454	
	Criticality	6.866		6.877	
5	If Performed	245	90.1	111	91.7
	Time Spent	\bar{X} 5.753		\bar{X} 5.824	
	Criticality	6.193		6.158	
6	If Performed	191	70.2	89	73.6
	Time Spent	\bar{X} 5.173		\bar{X} 5.310	
	Criticality	5.613		5.753	
7	If Performed	252	92.6	115	95.0
	Time Spent	\bar{X} 6.657		\bar{X} 6.003	
	Criticality	6.961		6.813	

Table 43, continued

Duty _b Area		Group 1 ^a		Group 2 ^a	
8	If Performed	N	%	N	%
		237	87.1	108	89.3
		\bar{X}		\bar{X}	
9	Time Spent	4.887		5.174	
	Criticality	5.454		5.683	
		\bar{X}		\bar{X}	
10	If Performed	N	%	N	%
		223	82.0	105	86.8
		\bar{X}		\bar{X}	
11	Time Spent	4.669		4.425	
	Criticality	4.894		4.957	
		\bar{X}		\bar{X}	
12	If Performed	N	%	N	%
		255	93.8	113	93.4
		\bar{X}		\bar{X}	
13	Time Spent	5.557		5.648	
	Criticality	6.113		6.049	
		\bar{X}		\bar{X}	
14	If Performed	N	%	N	%
		220	80.9	106	87.6
		\bar{X}		\bar{X}	
15	Time Spent	4.570		4.647	
	Criticality	5.035		4.885	
		\bar{X}		\bar{X}	

Table 43, continued

Duty _b Area		Group 1 ^a		Group 2 ^a	
12	If Performed	N	%	N	%
		223	82.0	103	85.1
	Time Spent	\bar{X}		\bar{X}	
	Criticality	4.674 5.105		4.740 5.141	
13	If Performed	N	%	N	%
		220	80.9	100	82.6
	Time Spent	\bar{X}		\bar{X}	
	Criticality	4.330 4.602		4.656 4.730	
14	If Performed	N	%	N	%
		207	76.1	96	79.3
	Time Spent	\bar{X}		\bar{X}	
	Criticality	4.532 5.052		4.548 4.818	

APPENDIX K. CRITERIA UTILIZED TO IDENTIFY IMPORTANT TASKS AND DUTY
AREAS FOR USE IN RECOMMENDATIONS

The identification of the important tasks and duty areas was based on the ranking of mean scores of time spent and criticality when the position of the respondent was the basis of analysis. This investigator set the following criteria, using the results as reported in Appendices I and J, for the determination of the important tasks and duty areas to be recommended for inclusion in the descriptive statement of the role of the Extension 4-H and Youth Leader.

The identified tasks must have met one of the two following criteria, but not both. The two criteria are:

1. Must be in the top 50 tasks in terms of criticality mean score by at least one of the two professional groups, and:
 - a. Both professional groups perceived the tasks accomplished by 90 percent of the Extension 4-H and Youth Leaders, or
 - b. In the top 50 tasks in terms of relative time spent by both of the professional groups.
2. Must be in the top 50 tasks in terms of relative criticality by both groups.